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ABSTRACT

There exists in the counseling and therapy professions the paradox of widespread endorsement of research with little use of, or engagement in, research in actual practice. This situation exists in large part because many counselors and therapists are less knowledgeable of research than they are of clinical practice. This collection of digests, therefore, provides professionals in therapy and counseling with information on trends in needed research in various specialties in the helping professions, fundamental research principles and practices, and important resources available to assist research processes. The first 12 digests here summarize the information available on needed research. Some trends are notable here. There is a need for more well-designed and controlled "experimental" research as well as research on the outcomes of professional services and practices. Likewise, the cost-benefit ratios of professional practices need to be investigated. The second set of digests present summaries of the research methodologies used most commonly in the helping professic The intent of these 10 digests is to present the major components, considerations, and procedures in each of the commonly used types of research methodologies. Finally, the last seven digests were assembled to assist readers in counseling research. The digests contain practical resources, suggestions, guidelines, and requirements for effective research practices. Contains an annotated bibliography on research in counseling and therapy. (RJM)

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Research in Counseling & Therapy

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A common concern of educators and practitioners alike is a perceived lack of adequate and relevant resources relating to research in counseling and therapy. While the quantity of resources is generally high, users frequently bemoan their lack of appropriateness for the intended use, whether it be basic instruction or continuing professional development for experienced counselors or therapists.

We therefore discussed with Larry Loesch and Nicholas Vacc the idea of a digest collection that was specifically designed for counselors/therapists who were either in graduate training or seeking professional development in an area (i.e. research) where they believed they had received insufficient training and experience on the job. In the view of almost everyone we spoke with, an adequate resource did not exist. We were therefore especially pleased that Drs. Loesch and Vacc responded with alacrity to our invitation to oversee the development of a unique resource designed to fill the existing void in instructional materials on research for educators and practitioners.

We believe that they have responded admirably to the challenge. The digests are pithy and targeted towards topics of high priority. The ideas presented are both comprehensive in their coverage of the area as well as of sufficient depth to offer immediate and practical help. In short, we believe that Drs. Loesch and Vacc, with the noteworthy assistance of a group of highly knowledgeable researchers, have produced a volume which is short on verbiage, but long on utilitarian content, which will be a most useful addition to the professional library of counselors/therapists at all levels of experience and competence. We commend them for a most worthy and highly needed contribution to the literature.

Garry R. Walz
Director, ERIC/CASS

Overview of Research in Counseling and Therapy

Larry C. Loesch and Nicholas A. Vacc

Research is truly an enigma in the counseling and therapy professions. To begin with, the need for helping professionals to have knowledge of and skills in research has been and continues to be widely acknowledged in the helping professions. For example, all the major sets of counselor and/or therapist professional credentialing standards, including those for preparation programs, certification, and licensure, have subsets of standards for research knowledge and skill development. On the other hand, it is widely acknowledged that a relatively small proportion of helping professionals routinely read research and an even smaller proportion ever, much less routinely, engage in research. Thus there exists in the counseling and therapy professions the paradox of widespread endorsement of research with little use of, or engagement in, research in actual practice.

There are probably myriad reasons for this paradoxical situation and an equal number of possible resolutions. For example, at an ideological level, some professionals lament that the counseling profession has not embraced the "scientist-practitioner" model to the extent necessary for counseling and therapy to become true professions. Conversely, others argue that methodic, structured, and "average-oriented" inquiry into human functioning is inherently contrary to fundamental precepts of the helping professions in which the uniqueness of each individual is revered. Similarly, some believe that most research texts are cumbersome to read, and that many are just plain obtuse. Others bemoan that many research reports are overly complex and/or demand research understandings beyond those of the intended readership. At the same time, some research texts and reports are criticized for being overly simplistic and therefore of little utilitarian value. As for possible resolutions, some have suggested that research practices must be greatly simplified while others have intoned that research preparation for counselors and therapists must be greatly intensified and extended. Our belief is that this situation exists in large part because many counselors and therapists, particularly those trained at the general-practice level, are less knowledgeable of research than they are of clinical practice. More specifically, they need additional training in (a) trends in needed research in various specialties in the helping professions, (b) fundamental research principles and practices, and (c) important resources available to assist research processes and effective practices for dissemination of research. It follows that one form of resolution is to provide such information in a manner that is well-suited to the needs of helping professionals. This is what we have tried to do in compiling the *Digest Collection* which follows.

New Directions in Research

Much has been written about needed new directions and trends in research in counseling and therapy. Unfortunately, the available information usually can be found only in disparate locations and only with a great deal of effort. Therefore, we asked the authors of the first 12 *Digests* in this collection to review the information available on needed research for various areas of professional specialization and then to develop effective summaries of it.

It is evident from the first 12 *Digests* that research is needed on many different topics in the counseling and therapy professions. However, a few broad trends are evident. First, there is need for more well-designed and controlled *experimental* research. Clearly both formative and summative information about counseling and therapeutic services must be obtained for the betterment of the professions. A second need is research on the *outcomes* of professional services and practices; what is the actual and measurable impact of professional counseling and therapy services? Third, *cost-benefit* ratios of professional practices need to be investigated. Demonstrated effectiveness alone is no longer a sufficient criterion; professional services must be delivered in cost-effective manners. Fourth, research methodologies must evolve from reliance on traditional, primarily quantitative perspectives to encompass greater recognition and acceptance of

newer, primarily *qualitative* perspectives. The use of qualitative methodologies and/or the inclusion of qualitative components in primarily quantitative research in the helping professions is a means of aligning research methodology with the philosophical underpinnings of the helping professions. Finally, emphasis on *diversity* must continue to be an important consideration in future research. There is increasing need to determine how people with uniquely identifying characteristics are both alike and different from other persons and how counseling and therapy should be practiced accordingly.

Research Methodologies

Few recommendations were presented in the first 12 *Digests* for the development or use of new or innovative methodologies, with the implication being that existing methodologies generally are sufficient *if* they are used correctly. The second subset of *Digests* present summaries of the research methodologies used most commonly in the helping professions. The intent of these 10 Digests is to present the major components, considerations, and procedures in each of the commonly used types of research methodologies. A major value of these *Digests* is that they are presented with direct and obvious relevance to research in the context of the helping professions.

The Pragmatic Aspects of Research

The last 7 *Digests* in this collection were assembled to assist readers in their research in counseling. The authors have provided many practical and helpful resources, suggestions, guidelines, and requirements for effective research practices, dissemination of research results, and use of research results to improve delivery of professional services. Several of these *Digests* indicate that technology, particularly computer technology, will play increasingly important roles in research on the helping professions. Today's researchers simply *must* be "technologically literate" in order to produce and disseminate research effectively so that it will be used beneficially. Consumers of research must become technologically literate because electronic distribution is rapidly becoming the primary and most cost-effective means of information dissemination.

A Hopeful Future

Research need not remain an enigma in the helping professions. Counselors and therapists have the power, and often the knowledge and skills, to change the situation to one in which the potential values of research become manifest for counselors and therapists. However, this change will occur if and only if counselors and therapists use research results more effectively and engage in research practices far more frequently than is currently the case. In turn, counselors and therapists will be able to make these changes most easily if they have effective research resources with which to work. It is our hope that this *Digest Collection* is a helpful beginning toward these goals.

Kudos

This *Digest Collection* is the result of the unselfish and professionally responsive sharing of time, effort, and expertise of the many fine professionals who made contributions to it. To the contributing authors we express our sincere appreciation for their spirit of collaboration and their willingness to give of themselves. We hope that all members of the helping professions similarly appreciate their efforts.

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The Problem of the Problem

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Research in Mental Health Counseling

Stephanie G. Puleo

Rapidly increasing and global changes in society as well as in the counseling market place necessitate that mental health counselors be responsive to new needs and demands. In addition, now more than ever, the research underlying mental health counseling must be relevant. "As the discipline of mental health counseling moves toward explicit core provider status, the relationship between concept and function... will require linkages that will serve to enhance assumptions about theoretical efficacy and intervention planning" (Johnson, 1993, p. 236). Research in mental health counseling should function as such a linkage.

There are two seemingly competing professional orientations to counseling within the field of mental health counseling. One perspective has its roots in the developmental/preventative models which, theoretically and historically, mark the foundation of professional counseling. The other is inextricably linked to the roles of mental health counselors as core service providers who must engage in remedial functions such as clinical diagnosis and treatment of mental disorders. However, according to Johnson (1993), it is unnecessary to view these two orientations as mutually exclusive; rather, they may be viewed as two different facets of the same entity. Johnson (1993) likened these perspectives to two sides of the same coin, which makes it difficult to see both sides at the same time, and challenged professionals to adopt a new perspective which allows the coin to be turned "sideways" so as to see the theory commonality wedged between perspectives. Researchers in mental health counseling should be similarly challenged.

Responding to Changes in Society

The mainstream population of the United States is growing both older and more pluralistic, and therefore mental health counselors have been called upon to make attention to diversity a priority. In response, major professional conferences and journals reflect increasing attention to diversity and multiculturalism, but there is much research yet to be done. For example, if it is the business of practicing mental health counselors to treat individuals with mental disorders, then it is also the business of researchers concerned with mental health counseling to investigate objective, culturally-sensitive criteria for diagnoses. Thus, there is a major need for researchers to develop psychometric instrumentation and/or evaluation procedures that are culturally fair (Locke, 1993).

Although much of the current mental health counseling research literature addresses interventions for specific clinical problems, research addressing clinical issues from multicultural perspectives is scarce. For example, between 1979 and 1988, less than 13% of the full length articles in the American Mental Health Counselors Association journals focused on minority groups such as ethnic-racial minorities, women, older adults, or persons with physical disabilities (Ernst & Ramirez, 1994). Moreover, none were focused on mental health issues of gay or lesbian individuals even though such issues are sorely in need of empirical investigation (Rothblum, 1994).

The scant research addressing mental health issues of various minority groups has contributed in large part to perceptions of mental health counseling as being culturally encapsulated (Ernst & Ramirez, 1994). More research is needed not only in regard to the development of appropriate treatments for various ethnic/racial minority group members, but also in regard to making counseling more attractive and available to persons in those groups. There are too few studies which address how to engage minority group members in counseling just as there are too few which address the processes and outcomes of counseling for minority group members (Kelly, 1993).

Responding to a Changing Market Place

If there is to be a substantive research link between theory and practice, there also must be effective links between those who provide mental health counseling services and those who consume them. Historically, mental health counselors have

been pressured to provide almost exclusively remedial services to people in crisis (Kiselica & Look, 1993). However, as society becomes more diversified and the counseling market place is required to respond to changing perspectives on service delivery (e.g., managed care), it is clear that proportionately fewer people will be served by traditional remedial care models. Johnson (1993) noted that, "even the medical profession is beginning to direct its attention, with the prodding of third party and managed care schemes, to prevention" (p. 236). A similar trend must emerge in mental health counseling.

Presently, mental health counselors are in the fortunate position of being the only non-medical core providers with a history of concern about both remediation *and* prevention. This may seem to be an issue of concern only to practicing mental health counselors. However, it also is an invitation to mental health counseling researchers. Suggested in the results of numerous empirical studies is that primary prevention is at least as effective as remedial counseling in regard to fostering mental health, yet the professional literature typically reports that prevention efforts are inadequate (Kiselica & Look, 1993). Thus, researchers are encouraged to "debunk the myth that the technology of prevention remains in the prenatal stages of development" (Kiselica & Look, 1993, p. 10).

Conducting Research in Mental Health

Just as mental health counseling practice is responsive to the needs within the counseling market place, research in mental health should be responsive to the needs of mental health counseling practitioners. Treatment paradigms which are culturally sensitive and responsive to counseling consumers' mental health needs within the domain of practice need to be created. Similarly, investigating the comparative effectiveness of new treatment paradigms falls within the domain of research. Again, rather than being mutually exclusive, the practice and research domains are interdependent.

Historically, mental health counseling practitioners have been challenged to investigate the effectiveness of the "typical" interventions they use with "traditional" clientele. In this regard, Kelly (1993) suggested that research approaches such as intensive case studies, qualitative methodologies, or survey designs are to be encouraged. More recently, mental health counselors have focused increased attention on more specific counseling topics such as addictions, aging, dissociativedisorders, eating disorders, gay/lesbian and bisexual issues, gender issues, concerns related to HIV and AIDS, post-traumatic stress disorder, personality disorders, and wellness. Attention also has focused on more specific techniques such as hypnosis, pain management, life review therapy, or technologically-assisted counseling. All of these certainly are viable and appropriate areas for further research and investigation.

Conclusion

If mental health counseling is to continue to be an evolving, vibrant profession, mental health counselors must adopt new perspectives which allow them to accommodate primary, secondary, and tertiary prevention perspectives, all within multicultural and gender sensitive contexts. Mental health counseling researchers thus are challenged to conduct studies having utility for practitioners as well as theoretical significance for others interested in the profession. Outcome and efficacy studies, as well as descriptive studies and needs assessments for specific clinical populations remain promising, meaningful and relevant areas for research. The application of innovative, perhaps less well-recognized, research methodologies to "traditional" topics are also needed. In addition, mental health counseling researchers should use more sophisticated data analysis procedures than have been used traditionally (Kelly, 1993). In sum, mental health counseling researchers should continue the best of what's been done historically *and* yet also strive to use innovative methodologies to address the wide variety of audiences to which the profession should be responsive.

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Research in School Counseling

Pamela O. Paisley and Richard L. Hayes

Research has demonstrated many positive effects of school counselors for students such as improvement in academic performance, attitudes toward self and others, classroom behaviors, attendance, self-concept, in-school behaviors, life and coping skills, peer relationships, career development, and learning motivation (Borders & Drury, 1992; Loesch, 1988). Positive results have been reported for deliberate psychological education to promote students' conceptual, moral, and ego developments (Borders & Drury, 1992).

Unfortunately, although there is empirical support for school counselors' effectiveness, the professional literature is replete with evidence of the lack of research being conducted by school counselors. Thus, as school counseling moves into the next century, it is critical to examine this situation and to suggest more appropriate research functioning.

Recurring Problems

Inadequate training, time, support, resources, and perceived role irrelevance have been suggested as reasons for the lack of research by school counselors. In addition, although most school counselors have had some research preparation, such preparation typically included models (e.g., experimental designs) not easily applied in schools. School counselors also often encounter formidable barriers to conducting research, such as administrative or parental resistance to students' participation (Perry, 1992). Research in schools has relied heavily on correlational (i.e., non-causal) rather than experimental research, has rarely linked interventions to theoretical foundations, and has focused on "fads." Research on practices *should* evolve from thoughtful and reflective application of theory and good measurement and evaluation.

Research in schools tends to include small-scale studies involving narrowly conceived interventions that are site-limited, thus greatly limiting generalizability. Needed are studies that can be replicated over time, sites, circumstances, problems, and student populations. Typically, only studies having statistically significant results are reported, yet much also can be learned from effective presentation of unsuccessful interventions (Loesch, 1988).

A dilemma of school counselors who undertake research is the nature of their work in schools. School counselors are expected to work from both developmental/preventive and remedial/dysfunctional perspectives; they are expected to be both educators and counseling clinicians. They must serve many constituencies, such as students, parents, teachers, administrators, and other human service providers. Further, despite the importance of understanding their work within a broader context, school counselors too often ignore educational research in favor of counseling practice only. For example, effective research on school counselor consultation with teachers requires familiarity with current educational research on classroom teaching and management.

Previous Recommendations

Critics have long called for a bridging of theory and practice in research, noting that school counselors seldom conduct research and often question its relevance. Pine (1981) argued that "the reintegration of research and practice is essential if any genuine progress is to be achieved in addressing pressing and important issues in school counseling" (p. 495). Loesch (1988) emphasized the need for an empirical research base for a profession and recommended (a) legitimizing research as part of the school counselor's role, (b) giving greater attention to school counselors' research skill development, (c) involving practicing school counselors in research, (d) helping school counselors and trainees learn the full range of research approaches, and (e) shifting the focus of school counseling to applied research.

In response to this challenge, standards have been established for school counselors' knowledge and skills preparation in research that requires

"studies that provide an understanding of types of research methods, basic statistics, ethical and legal considerations in research" (CACREP, 1994, p. 52). The American School Counselor Association (ASCA) has developed a resource manual for action-oriented research for school counselors (Allen, Gallagher, & Radd, 1992) and a special issue of *Elementary School Guidance and Counseling* (Campbell & Deck, 1990) was focused on research and evaluation. However, despite these efforts, school counselors still do little research. For example, ASCA leaders continue to note infrequent compilation and dissemination of research data or publication of research data by school counselors (Deck, Cecil, & Cobia, 1990).

The professional challenge continues to be how to get school counselors more involved in research. Traditional approaches have not been fruitful; therefore, new strategies are needed. A promising possibility is to involve school counselors with more researchers in more applied research.

Collaborative Action Research in School Counseling

A new approach for school counselor participation in research requires acceptance of a few underlying premises. First, schools are not scientific laboratories. Isolating variables specifically contributing to identified change is difficult when conducting research in the realities of public schools. Second, teaching research in isolation from practice yields irrelevant research and discourages school counselors from using research for program evaluation and improvement.

With these assumptions in mind, the preparation of school counselors should introduce students to basic research skills with a focus on knowledge of and experience with collaborative action research (Pine, 1981). Action-oriented research is focused on local situations and immediate applications, and seeks to improve the quality of programs and services. As an approach grounded in "school realities," typical methods include use of surveys, qualitative questionnaires, case studies, behavioral observations, needs assessments, self-audits, and experimental studies to gain accountability and/or biographical or portfolio data (Allen, 1992; Hayes, Dagley, & Horne, in press).

This approach requires commitment to collaboration between universities and schools as well as to a unique vision of the purposes of research. The purpose of collaborative action research is to improve practice rather than to generate universal truths. Graduate students must be involved in teams with practicing school counselors and other school-based educators to collect data. Counselor educators must support the process and be actively engaged as collaborators in designing, implementing, evaluating, and modifying interventions based on theoretically sound principles.

Although focused on local school applications, the approach does ignore the benefit of generating broad-scale knowledge. Many issues are common across schools and situations, yet methods of addressing the concerns differ only on site-specific needs and resources. Comparing interventions across settings and replicating studies at the same site allows generalized understanding of results and conditions. Such studies are particularly important for evaluation of effectiveness of developmental components of school counseling programs.

Preparing school counselors to participate as valued members of an educational community presents a challenge for school counseling research: to develop questions and procedures for understanding the professional development of effective—even masterful—school counselors. In addition to the school counselor functional effectiveness, much remains to be learned about "professional becoming." An understanding of school counselors is needed, including an understanding of their pre-service and in-service professional development and their professional needs. Action-oriented research can be valuable in this regard.

Summary

Research by school counselors is essential for preservation of the specialty, enhancement of the knowledge base, evaluation of effectiveness, improvement of services, and understanding of professional needs. For meaningful research to be conducted in schools, school counselors need to be involved in research practice from the beginning of their preparation and throughout their involvement in professional practice. Thus, school counseling graduate students, practitioners, counselor educators, and supervisors should work together in localized collaborative action-oriented research.

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Research in Marriage and Family Counseling

Gerald A. Juhnke and M. Quinn Lontz

The professional field of marriage and family counseling has experienced a significant evolution during its half-century history. Pioneering marriage and family counseling researchers and theorists used their understanding of diverse disciplines (e.g., mathematics and anthropology) to create a "holistic change" theory. This theory was founded upon reciprocity and shared responsibility within multiple systems (Becvar & Becvar, 1993), and has gained recognition as a psychotherapeutic treatment (Gurman & Kniskern, 1992).

Early marriage and family counseling theory has been evaluated primarily through subjective impressions from clinical practice or through research methods with a small number of subjects. For example, case studies played a vital role during the formative years of marriage and family counseling practice. Thus, seminal marriage and family counseling techniques and theories were developed by clinical practitioners isolated from academic settings. Professional pressures toward traditional research and publication were absent outside academe (Coyne & Liddle, 1992), and the vast majority of marriage and family counseling practitioners "...considered empirical investigation an option rather than a necessary interest" (Taggart, 1989, p. 237). Thus, until recently, marriage and family counseling treatment providers adopted marriage and family counseling interventions for reasons other than evidence of empirical effectiveness (Coyne & Liddle, 1992; Sprenkle & Bischoff, 1995).

The lack of empirical research on marriage and family counseling effectiveness created distinct problems. Without significant evidence to support marriage and family counseling benefits to clients, funding sources were reticent to financially underwrite future research. Reciprocally, being eclipsed from funding opportunities limited marriage and family counseling research participation in more extensive, well-supported, and sophisticated empirical investigations. Recognition of the problems associated with not having a strong empirical basis spawned movement in the marriage and family counseling field toward use of more substantive and generally less subjective empirical research methods. Over the last two decades marriage and family counseling researchers have significantly increased their empirical research activities.

Methodology and Research Design Transformations

Sprenkle and Bischoff (1995) reported that marriage and family counseling research has experienced two major transformations. The first was the move from impressionistic to quantitative research. Marriage and family counseling investigators shifted from subjective descriptions of clinical case work (i.e., impressions) towards the deductive-type (i.e., quantitative) research favored by the medical professions. Quantitative research presumably limited threats to internal and external validity and allowed determination of cause-and-effect relationships.

The second transformation, which is a move from quantitative to qualitativemethodologies, is in progress (Sprenkle & Bischoff, 1995). Qualitative research is more inductive in nature and encourages exploration of the richness of interacting systems. The theoretical underpinnings of marriage and family counseling are closely aligned with qualitative research; both are holistic and encourage consideration of systemic dynamics. Thus, qualitative methods increase the marriage and family counseling researcher's capacity to capture the full essence of families. In contrast, medical and hard-science models espouse a reductionistic orientation which is linear in approach.

It is unlikely that quantitative methods of marriage and family counseling investigation will be eliminated because academic and funding agencies have traditionally favored quantitative methods. Therefore, marriage and family counseling investigators will find it increasingly useful to combine compatible qualitative and quantitative

research methods. Such combinations will help both researchers and clinicians better understand family change.

Concomitantly, investigators increasingly will need to attend to clinical, *vis-à-vis* statistical, significance in marriage and family counseling research (Gurman & Kniskern, 1992; Jacobson, Follette, & Revenstorf, 1984; Sprenkle & Bischoff, 1995). Statistical significance suggests a numerical difference between two or more treatments. However, it does not necessarily indicate that subjects have experienced symptom relief or meaningful change. *Clinical* significance implies that subjects have experienced symptom reduction and achieved better functioning as a result of specific treatment(s). Achieving clinical significance improves marriage and family counseling marketability because it serves to distinguish which treatments clients report as helpful. Furthermore, research which incorporates evaluation of clinical significance aids counselor educators in training new marriage and family counseling treatment providers. Therefore, marriage and family counseling treatments and techniques that have been shown to have clinical significance, preferably in combination with those having been shown to have empirical significance, warrant inclusion in marriage and family counseling training.

Noteworthy Investigation Domains

Despite the number of prominent marriage and family counseling theories (e.g., strategic, structural, or extended family systems), investigators have frequently compared individual counseling treatment(s) to marriage and family counseling. Needed are investigations which compare the effectiveness *among* specific marriage and family counseling approaches. Marriage and family counseling theories and their applications also need to be examined in regard to effectiveness with specific symptomology such as substance abuse and affective and personality disorders. To distinguish even greater effectiveness among marriage and family counseling approaches, techniques common to multiple theoretical perspectives (e.g., reframing) need to be investigated apart from as well as within the context of specific theories. Marriage and family counseling researchers also need to determine whether techniques work more effectively within certain theoretical frameworks or whether they can be used interchangeably without diluting efficacy.

Another variable which warrants further examination in marriage and family counseling research is the influence of counselor/therapist characteristics andbehaviors. What initially might appear to be differences in effectiveness based on specific marriage and family counseling theories may actually be clients' responding more favorably towards certain counselor/therapist characteristics or behaviors. Therefore, understanding how counselor/therapist characteristics and behaviors affect treatment outcome is critical to the marriage and family counseling profession.

Ever-changing family structures deserve investigation as well. Blended and single-parent families have become common. Families increasingly assume responsibilities for aging parents. Many adult children are leaving home at later ages, while others find it necessary to return to their parents' homes. Adaption to such social, relational, and financial pressures engender structural changes to existing and developing families. Investigation of the potential effects which these structural changes create will aid marriage and family counseling counselors/therapists in providing improved therapeutic interventions.

Gaining greater understanding of marriage and family counseling approaches that demonstrate the greatest possible potential for addressing concerns common to specific clientele groups (e.g., urban African-American families or rural gay or lesbian families) will improve treatment. Outcome-based marriage and family counseling research holds the key to such understanding. Without capitalizing on outcome-based research, marriage and family counselors are using unsubstantiated approaches in the attempt to provide help.

Might there be benefits to training educators and other helping professionals in aspects of systems theory? Does systems theory have a future in the work of school counselors? Research can provide answers to such questions and thereby help marriage and family counselors gain better understanding of how to facilitate positive change in children and families. For example, the potential benefits of marriage and family counseling training for school counselors has been suggested (Hinkle, 1992).

Summary

The effects of research on the marriage and family counseling field have been examined in view of former and current research trends. Marriage and family counseling research has undergone a clear progression that began with clinical impressions and evolved into more traditional quantitative research. Currently, there is increasing use of qualitative studies and examination of clinical effectiveness. Important

research domains have been identified and research concerning them has begun. It is expected that the field of marriage and family counseling will improve directly as a function of the improvement of its research base.

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Research in School Psychology

Thomas H. Hohenshil

School psychology has been viewed traditionally as an applied field which encompasses both psychology and education, and has an especially close relationship with special education. School psychologists have a broad base of training in both education and psychological foundations, as well as preparation in the specialty of school psychology. Although the vast majority of school psychologists are employed in public schools, some work in private practice, hospitals, colleges and universities, and institutional settings.

School psychologists traditionally have provided a wide variety of services, including psychological assessment, consultation, treatment interventions, inservice training, administration, and research. Interestingly, in a recent study to determine the amount of time nationally certified school psychologists actually devoted to these traditional services, research was ranked last, with less than one percent of school psychologists' time being devoted to this important area (Fagan & Wise, 1994). There is, however, a clear trend that many school psychologists view research as an important part of their work and that their practice needs to be firmly grounded in research findings. Many school psychologists have expressed interest in conducting research in school settings and many others want to do a better job of incorporating others' research into their practices. Keith (1995) defined research in school psychology as (a) activities designed to produce new scientific knowledge or (b) the use of existing research results to improve school psychological practice. He also suggested that there are three research roles for school psychologists: being competent consumers of research, serving as disseminators of research, and being producers of research. It is not unreasonable to suggest that all school psychologists should be at least competent consumers and disseminators of research. However, some also will have the interest and skills to conduct scientific research.

There are several research trends which are closely related to the services that school psychologists provide. Some of these trends involve school psychologists actually conducting the research, while others are concerned with the successful use and dissemination of others' research. However, because space prohibits a discussion of all of these trends, only three major psychological services trends are covered: assessment, intervention, and consultation.

Trends in Assessment Research

Research in school psychology clearly reflects the profession's long-term emphasis on psychological assessment. A review of the last five years of professional literature clearly indicates that assessment will continue to be a significant line of research. School psychologists conduct assessment research on a variety of formal tests and informal procedures, including standardized intelligence and achievement tests; curriculum-based assessments; and adaptive-behavior, vocational, and various personality assessment techniques. One clear future research trend is determining the validities and other psychometric properties of new and/or revised instruments, such as the WISC-III, and curriculum-based and vocational assessment procedures. A second research trend is related to assessing children with various types of disabilities, including multidimensional assessment of learning and emotional disorders, profound disabilities, vocational potential, and written expression. Research focused on the assessment of attention disorders and conduct disorders also will receive considerable emphasis in the future (Thomas & Grimes, 1995).

Trends in *how* assessment research will be conducted will attract the attention of school psychology researchers in the future. For example, there is a consistent need for more and better theory to guide both the development of future assessment research designs as well as the interpretation of results. Relatedly, it is expected that there will be greater use of more sophisticated computer technology to routinely allow for highly complex

data-analysis procedures.

Trends in Intervention Research

Another primary service that school psychologists provide is intervention services, including techniques such as individual and group counseling, behavioral management, social-skills training, parent and teacher training, and special instructional techniques. Services such as these might be delivered directly by school psychologists to students experiencing learning or behavioral problems, or school psychologists might recommend that appropriate interventions be provided by others such as school or mental health counselors, teachers, or parents.

Best Practices in School Psychology III (Thomas & Grimes, 1995) provides an excellent overview of intervention procedure trends, including investigating effective methods to link assessment data with intervention techniques, implementing high quality transition services, applying early intervention designs, providing preschool social skills training, identifying and treating children who have been abused, teaching study skills, facilitating school reintegration, and using effective counseling techniques for elementary and secondary school children. Although group *quasi*-experimental research designs have been used frequently to try to determine the effectiveness of these techniques, there is both a clear trend and future need to assess the effectiveness of many intervention techniques through the use of single-subject and other idiographic research designs.

Trends in Consultation Research

A third principal service provided by school psychologists is consultation. In consultation, the school psychologist does not provide a direct service to the student, but rather works through significant others (e.g., teachers, parents, or counselors) to indirectly effect change in student learning and behavior. Consultation in this context might include helping parents to implement behavior management practices at home, working with teachers to develop effective learning strategies for a particular student, working with school counselors to select and implement effective counseling procedures for problem behaviors, and/or helping entire school systems develop and initiate sound educational programs.

Well-controlled consultation research is difficult to find in school psychology literature, and most of what exists is related to process and/or outcome research. Taken as a whole, consultation research can be characterized as rather poorly defined, poorly measured, and poorly controlled. Future consultation research needs to be directed to more clearly defining the process of consultation and todevising better ways to determine the outcomes of that process. It is clear that there is a great need for research in all aspects of the consultation service (Gresham & Kendell, 1987; Zins & Erchul, 1995), and since consultation is being highly promoted as a major psychological service, it can be expected that research in this area will gain in importance in the future.

Summary and Conclusions

Although the above three major psychological service categories will enjoy a large proportion of future research, there are other areas which will attract research activity. For example, the profession is so broad that school psychologists will be found doing assessment and/or consultation research in virtually all areas of special or regular education. The problem facing school psychology is not finding an area of needed research, but rather being able to focus the research resources of the profession on areas of highest priority. Part of the problem is related to the age-old question of what is the proper role and function of school psychologists. Their roles have been broadening over the last decade from the traditional school psychologist who only "tests for special education" to that of a broadly functioning psychologist who provides assessment, intervention, and consultation services for others as well.

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Research in Career Counseling

Edwin L. Herr

Research in career counseling has a long, positive, and comprehensive history of topics addressed and findings available. However, not all the relevant questions have been asked or answered. The content, definition, theories, and practices of career counseling continue to change and thus the need for additional career counseling research is constant.

Summative and Formative Perspectives

The relevance of career counseling research findings is dependent upon the definition of career counseling and/or career intervention used, but available findings do not always distinguish well among the different types of career interventions. Rather, studies are pooled to examine effects. Some research studies aggregate all career activities that may have occurred in a particular setting or for a particular population and then compare them with doing nothing or interventions that were not career related. Such approaches can be justified in a *summative* sense if the question is whether career interventions are effective in improving career knowledge, attitudes, or behaviors. However, another important *formative* question is whether different career interventions achieve the same outcomes. Formative research questions tend to be the foci of new research directions in career counseling (Herr & Cramer, 1996). Before elaborating, however, it is useful to review the major effects of various career interventions, including career counseling.

From a summative perspective, meta-analyses and other research techniques have permitted researchers to summarize findings from large numbers of studies and to determine aggregate effects on career knowledge, attitudes, or behaviors. These summaries demonstrate that career education (Baker & Popowicz, 1983; Herr, 1977; Hoyt, 1980), career counseling (Holland, Magoon & Spokane, 1981; Spokane & Oliver, 1983; Oliver & Spokane, 1988), and career guidance (Herr & Cramer, 1996) yield positive results. Thus, the utility of such interventions is no longer in doubt (Rounds & Tinsley, 1984). For example, Campbell, Connel, Boyle, and Bhaerman (1983) examined the positive effects that various career development processes produced and classified them into the following five broad categories.

Improved school involvement and performance. Analysis of 41 studies showed that gains in student career development outcomes were primarily attributable to individualized career development learning experiences (e.g., experience-based career education or exploration or career counseling).

Personal and interpersonal work skills. Positive outcome variable (e.g., self-awareness, interpersonal and life skills, or work values) effects for various career processes were found in the majority of 31 studies in this category.

Preparation for careers. Positive gains in career preparation were found in 12 of 14 studies examined on four types of interventions: career counseling, classroom career guidance instruction, employer-based career education, and hands on career exploration activities.

Career planning skills. Various career processes were employed in 34 studies of interventions to increase students' and adults' career planning skills. Career/vocational counseling was the principal intervention used, 80% of which produced positive results. However, the proportion of studies in which career counseling was the principal intervention was not precisely identified and therefore the possible positive outcomes could be higher or lower than those cited.

Career awareness and exploration. In 31 of the 44 studies examined, career and vocational exploration, experience-based career education, career education classroom activities, and career counseling yielded the most positive results.

While it is apparent from such analyses that career counseling is an effective career intervention

for many purposes, there has been relatively little *comparative* research on its effects. In contrast, Oliver and Spokane (1988) found from their extensive literature review that individual career counseling, although costly, is the most efficient career intervention in regard to gain per hour of effort. In addition, this review concluded that 10 or more sessions as well as more comprehensive sessions yield roughly twice the beneficial effects of briefer interventions.

New Research Directions

Existing findings set the stage for new directions for research in career counseling. Although career interventions generally have positive effects, determination of which interventions work with whom and under what circumstances is needed (Savickas, 1989). Future career counseling research must include more rigorous evaluations of all types of career interventions and of how each type of intervention actually works. Examination of linkages between client goals and differential career process effectiveness is needed to define a client-treatment interaction matrix that effectively summarizes what is known about outcomes of particular interventions, conditions under which these outcomes are achieved, and client populations for whom such interventions are most effective.

Development of a comprehensive and useful client-treatment matrix requires new directions in career counseling research, one of which is increased attention to differential cost-benefit effects. For example, career counseling is more expensive than other career interventions, but also is more effective. Unfortunately, research results supporting this conclusion have not been cast in terms of "dollars saved." For example, by preventing student drop out behavior, these clients become economic contributors to rather than a drain on society's resources. Thus, it can be argued that career counseling and other interventions are in fact *generators* of economic resources. Therefore, analyses which include cost-benefit ratio information for career counseling are important aspects of formulating such a client-treatment interaction matrix.

Future research is needed to increase clarification and understanding of different approaches to career counseling. Relatively little research has addressed the outcomes of career counseling processes based on different procedures and conceptual perspectives. For example, stating that career counseling is different from career guidance assumes that each is a singular process and belies the reality of different models of both career guidance and career counseling.

To move toward a useful client-treatment matrix effectively, future research should be focused on variation in client preferences for career interventions. For example, many currently used career counseling techniques were developed for white, middle-class, often college-educated populations. Career counseling research is increasingly addressing non-college-educated persons, but research addressing career counseling for diverse populations is not yet as frequent or comprehensive as necessary. This is due, in part, to theorists' argument that all persons deserve equal access to career services. While this assertion is philosophically accurate, it does not mean that all persons need or find useful the same career services delivered in the same way.

Extended discussion of new statistical and methodological approaches in career counseling research is not possible herein, but brief observations may be made. Future research should be characterized by increasing concern about the meaning of statistical versus practical significance, sample size effects, power and/or effect sizes, and the need for the replication or cross-validation. Also needed is increased precision in findings and interpretations. More attention must be paid to definitions of concepts studied. Future research should include clear conceptualizations of what is being studied as well as measurement strategies that accurately represent variables studied. Finally, most career counseling research has been grounded in a positivist, quantitative, and empirical tradition. However, although experimental, hypothetico-deductive approaches are important, other means exist to gain understanding of the richness, variety, complexity, and interactive nature of the human experience. Thus, qualitative research approaches should grow in use, including methods such as auto-biography, biography, life histories, psycho-biography, life narratives, story or drama, ecological approaches, case studies, structured interviews, self-confrontational interviews, and action analyses.

Summary

Career counseling is not a singular approach; it can be differentially defined and implemented. It is one of many career interventions that can be used to pursue the development or change of career behavior. Therefore, research in career counseling is important, but complex. Needed is research that distinguishes the effectiveness and outcomes of different

approaches to career counseling as well as comparisons of career counseling to other career interventions. Future directions include greater attention to cost-benefit ratios, comparative outcomes, and use of innovative research methodologies.

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Research in College Counseling

James M. Benshoff

Research related to college students and the college environment is essential to understanding, recruiting, and retaining students, and intentionally impacting their development. Pascarella and Terenzini (1991), in their review and synthesis of two decades of research, found that "the number of empirical studies added to the literature has surpassed the number produced in the preceding four decades" (p. xv). They attributed this growth to an increase in student development models and theories, availability of increasingly sophisticated systems and tools for compiling and analyzing data, and greater use of more complex research designs and procedures. They also cited numerous external factors that have stimulated research, including an increase in funding challenges, for a critical examination of higher education institutions by legislators and consumers.

Bloland, Stamatakos, and Rogers (1994) were more critical of the state of research in college counseling as a result of their content analysis of 598 articles from four major student affairs journals. For example, they found only five studies utilizing qualitative methodology. Further, they decried the lack of experimental studies, a failure to use control or comparison groups in many studies, and "insufficient time in treatment" (p. 47). They also questioned student development theories as adequate or appropriate bases for understanding and/or influencing the effects of college on students. They wrote that "despite the field's seemingly wholesale conversion to student development, the research evidence in its support is sparse" (p. 9).

Defining College Counseling

College counseling can be defined as programs and services, including counseling, provided to students in institutions of higher education by professional staff with graduate degrees in counseling, college student personnel work, or related areas. However, despite common references to the "profession of student affairs," student affairs fails to meet key criteria for a profession, particularly establishing and implementing training and education standards, and controlling the practice and provision of services by its members (Hosie, 1991). For example, although both the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) and the Council on Accreditation Standards (CAS) have established sets of standards for the preparation of student affairs professionals, those standards have yet to be implemented widely as minimum requirements.

Discussion and Recommendations

A review of the *NASPA Journal* and the *Journal of College Student Development* provides an informative perspective on the types of research that have been dominant in student affairs during the last 10 years. Themes in the *NASPA Journal* have focused on professional issues related to student affairs practice and practitioners: accountability, approaches to and evaluation of retention efforts, student leadership development, multicultural issues, nontraditional students, alcohol issues, discipline, and women's issues. Primary research topics in the *Journal of College Student Development* (formerly the *Journal of College Student Personnel*) over the same time period included career development, placement, and counseling; minority students and multiculturalism; alcohol issues; disabled students; retention; assessment of academic performance; parent orientation and involvement; peer counseling; violence; ethical and moral development; health issues; and issues related to gay and lesbian students.

Pascarella and Terenzini (1991) suggested new directions for research in college counseling as follows:

1. More research to examine change *caused by* college attendance as well as change *during* college.
2. More research on developmental theories and models that have been relatively neglected in the literature.
3. More research on the timing of changes during college and the roles of students'

individual characteristics in influencing the effects of their college experience.

4. Greater use of qualitative research methods to develop deeper, more detailed understanding of how and why students change during college.

Other important topics in college student counseling have received relatively little attention, but they are worthy of additional research. For example, developmental programming in residence halls appears to be the norm, but little research has been conducted to determine the effectiveness of such programming in positively impacting the development of residents. What factors (e.g., time, group size, length of intervention, training of presenters/trainers, content of programs, coordination with other programming efforts) are correlated positively with developmental change? Do the programs make a difference and are they justifiable in consideration of the resources expended in developing and implementing them? Similarly, little research effort has been directed toward the nature or effectiveness of conflict resolution and mediation efforts on campuses. How can concepts and methods of conflict resolution that have been used widely in public schools, business, and other settings be applied effectively in institutions of higher education? What are the effects of such efforts in promoting development among students, retention, and job or environment satisfaction?

The developmental needs of nontraditional and ethnic minority students on campus also have been relatively neglected in the literature. Research related to these two expanding groups has tended to focus on their attitudes, needs, and use of services, but with little relation to developmental theories or developmentally-based interventions and outreach efforts.

Research on peer consultation and peer supervision approaches to support both professional and paraprofessional student affairs staff also has been neglected. Although evidence exists to suggest that such interventions can be effective (Benshoff, 1993), there is a need for further investigation and understanding of peer consultation to revise, improve, and effectively implement existing models. More research is needed to address the roles and effectiveness of student affairs staff in fostering students' cognitive, moral, and values development. The roles and impact of technology on the provision of student services and on students also needs to be investigated further. How might technology and staff efforts be combined to effectively deliver both services and developmental programs?

Robinson (1995) noted a need to more critically research different student affairs approaches and to determine those which are most appropriate for students with varying developmental needs. For example, what are the most effective *and* developmentally appropriate approaches to facilitating traditional, minority, and nontraditional college students' career development?

Although some attention has been given to staff development, the overwhelming majority of articles have focused on issues related to students' adjustment, success, concerns, and progress in college. For example, during the last 10 years of the *Journal of College and University Student Housing*, only a few articles addressed the professional development needs and practices of residence hall staff. More research is needed to examine (a) the professional preparation and training of student affairs practitioners including their professional development needs, affiliations, roles and identities; (b) the relationship of training to effectiveness in working with students; and (c) the impact of licensure and credentialing on student affairs practice.

There also is a need to reexamine the roles and effectiveness of college counseling centers in meeting the needs of student clients. Future research in this area should focus on programmatic efforts (e.g., outreach and prevention programming), qualifications and roles of professional staff, and impact of linkages between counseling centers and other campus programs and services.

Summary and Conclusion

Research efforts in the area of college counseling must be expanded to include more qualitative research, the development and evaluation of new theoretical models, increased attention to understudied populations, more critical evaluation of the impact of campus programs and services, and the identification of the professional development issues of college counselors. A final recommendation is to encourage greater collaboration among college counselors, graduate students in counseling and student affairs practice preparation programs, and faculty in conducting research in these critical areas.

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Research in Group Counseling

Diana Hulse-Killacky

As this century comes to a close, group work emerges as one of the most interesting phenomena in the counseling profession. The sheer number of group counseling methods, which are applied to a wide range of mental health issues for a variety of populations, attests to group work's visibility and impact. Over the last several decades, a surge of research studies have increased knowledge about how certain types of groups are effective under specific conditions (Bednar & Kaul, 1994). The challenge now is to seek answers to research questions that will help counselors understand how group processes specifically operate in effective groups. The question is not whether groups work, but rather which group-specific independent and dependent variables are associated with successful process and outcome (Bednar & Kaul, 1994).

Presented in this paper are some topics to guide future group research. Addressed are traditional practices as well as the broad and expanding uses of group work, including those in task/work and psychoeducational arenas. In particular, group-specific variables, professional standards for training group workers, and changing conceptualizations of group leadership and membership are examined. Clarification of these factors through effective research will enable the results to be clearly communicated to professionals and the public.

Beyond Merely Outcome Research

Group counseling research is faced with the need for clear descriptions of variables related to what actually happens in a group (Bednar & Kaul, 1994). The group process literature to date includes valuable information about factors such as cohesion, interpersonal feedback, self disclosure, and leader and member behaviors in a group. Future research should continue to explore and clarify these group process variables. Unfortunately, the approach in many group work studies has been to apply theories drawn from individual counseling and psychotherapy. When such a perspective is employed, dimensions, dynamics, and interactions unique to group work may be overlooked. For example, Bednar and Kaul (1994), after examining the research on the effectiveness of group work on clients with bulimia, raised questions such as whether the group members really understood one another and whether the nature and quality of the communications between group members and group leader have bearing on the outcomes. Without information on *how* members improve, group counselors cannot know the group-specific variables associated with positive change. Thus, the amount of effect that can be attributed to the type of treatments given by whom and under what conditions is unclear. Group research must yield more and better information about mediating effects of leadership styles, member styles and roles, and group interactions styles.

Commonality or Uniqueness?

Examining process questions has further appeal when considering the broad methodology of group work, including applications in educational, counseling, therapy, business, and community settings. The Association for Specialists in Group Work (ASGW) training standards organize group work into four specialties that could provide direction for group work process research for each specialty. However, Donigian (1994) wrote that "regardless of the group's focus or purpose, processes remain the same, and thus link groups together" (p. 6). Is Donigian correct? Do processes exist that are common to all groups? If so, what are these processes and how can they be facilitated in ways that serve the goals of groups with varied purposes? If there are processes common to all kinds of groups, how then do counselors work differently when working with different types of groups?

Group Leadership and Membership

Other group process dynamics worthy of investigation emerge from descriptions of groups as

circular, collaborative, or collective systems and from descriptions of leadership styles as lateral (Rogers, 1988; Ward, 1993). Interesting questions arise from such descriptions: Is it possible for a group leader to be a leader and a follower? What impacts follow from different leadership styles? Are leaders who direct and control both group process and content more or less effective?

Viewing members as active resources presents opportunities for research involving careful observation and description across a range of group types. For example, how can a counselor who has 30 minutes for a skill-building group use the group's resources in the most effective and efficient manner? What does it *really* mean to enhance the working of teams and to mobilize the resources of the group members into active, vital contributors to the work of the group? Answers to questions such as these are especially important as new types of groups are developed, particularly those with members representing multicultural diversity or different ideologies.

Back to Basics

The call for more group process research coincides with the recommendations of Hoshmand and Polkinghorn (1992) to use the counseling context for "constructing and testing our maps of instrumental knowledge" (p. 63). They suggest that discovery methods can be applied successfully to the study of group process variables. Thus, such methods can help group researchers tease out important and sometimes complex, group-specific phenomena present in groups with positive outcomes.

Irving Yalom's clinical observations on therapeutic factors exemplify insightful and comprehensive inquiry and knowledge generation with a focus on variables indigenous to group psychotherapy (Bednar & Kaul, 1994). Yalom's work led the way for research studies that examined the influence of many commonly known group work principles (e.g., that universality is more important early in a group whereas interpersonal learning has more potency later). Yalom's formulations and their applications to subsequent research demonstrate how observations conducted in naturalistic settings can be merged with (a) experimental outcomes to clarify links between process and outcome and (b) research methods and instruments such as the Corrective Feedback Instrument (Hulse-Killacky & Page, 1994).

Conclusion

As group counseling practice moves into the 21st century, research strategies will extend beyond the traditional scientific models which currently focus primarily on group counseling outcomes. Creative venues for generating knowledge about the effectiveness of group work treatments and the role of the group as the agent of change will be needed. Relatedly, process research will need to address accountability concerns in group counseling practice. Because of financial mandates and policies, managed care debates, or the consumer's right to know about the effectiveness of group therapeutic interventions, counselors will need valid and substantive information about outcomes and the links between process variables and particular outcomes. Thus, counselors in a wide variety of settings who use group processes will need to find ways to address the needs of their clients in efficient and effective ways. Group counseling research therefore will play a strategic role in providing answers to questions that matter to both group workers and the people they serve. The knowledge-generating approaches advocated here will help guide the education and training of competent group leaders and serve to enhance research on group counseling. The results of these efforts will in turn allow counselors who do group work to make a truly positive difference in the quality of services rendered.

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Research in Multicultural Counseling

Mary Howard-Hamilton

A plethora of information is available about the demographic outlook of the United States as the next millennium approaches. In particular, the population proportion for Whites in the United States will continue to decline while that for people of color will be steady or increase (Ponterotto & Casas, 1991). Currently, there are approximately 250 million people in the United States (Dana, 1993). Hispanics, Native Americans, Asian Americans, African Americans, and other people of color now comprise 25% (approximately 61 million) of the population, but the proportion will rise to approximately 33% by the year 2000. One result will be a multiplicity of complex problems, issues, and difficulties people of color will present to their counselors. Thus, societal shifts and demographic changes will reshape interpersonal communication styles and the ways therapeutic interventions are conducted. They also will impact research methods used in the counseling professions because there will be even greater need for culturally-sensitive (i.e., multicultural) research relative to the characteristics and needs of racial/ethnic minority persons in the United States (Ponterotto & Casas, 1991).

Providing Culturally Relevant Research

Pedersen (1991) wrote that multicultural research is often an arduous process for three reasons. First, culture is a difficult and complex construct to define, and therefore to measure. Second, findings about specific ethnic, racial, or cultural groups may not be generalizable to other populations. Third, most researchers conduct studies on abstract relationships among variables, rather than on concrete, practical applications of knowledge. However, because (technically) multiculturalism applies to all counseling functions, it should be a considered component in all research in the counseling profession. Culturally-insensitive research accommodates and perpetuates inadequate training and subsequent ineffective counseling (Ponterotto & Casas, 1991). Therefore, again, culturally-sensitive research is sorely needed.

Multicultural mental health counseling has little chance of significant improvement without high quality, culturally-relevant, and meaningful research. Major criticisms of the current status of research focused on multicultural populations have been delineated by Ponterotto and Casas (1991). For example, they noted that biased research paradigms, such as those that address racial, ethnic, or cultural groups from pathological, deviant, or culturally deficient perspectives, have been presented in the literature. They also found that the vast majority of the multicultural research has not provided meaningful empirical data, but rather has provided primarily speculations and anecdotal material.

Another criticism is that important intra- and extrapersonal factors, such as client and counselor attitudes, communication styles, levels of acculturation, personal biases, and client-counselor racial similarity, that may provide enhanced meaning to the behavior of persons of color have been virtually ignored in theresearch. These client and/or counselor variables are believed to impact counseling processes significantly. Further, most research has not considered or incorporated the heterogeneity extant in multicultural populations, a tact which has fostered and perpetuated ethnic stereotypes and negative perceptions. Much research also includes only easily accessed subject groups (e.g., college students), ones which often are not representative of larger populations of people of color. In addition, there has been considerable over-reliance on research using analogue designs "whereby the subject pools have consisted of pseudo-clients (e.g., students) and pseudo-counselors (e.g., graduate students in counseling) instead of "real" clients and counselors" (Ponterotto & Casas, 1991, p. 78), which again limits generalizability to more common client and counselor populations.

Concern has been raised over the validity and applied utility of many research findings now in the multicultural literature (Ponterotto & Casas, 1991).

Specifically, lack of conceptual/theoretical frameworks and effective hypotheses to guide research engender nonsystematic designs, with the result being a disparate mix of contradictory findings. There has been overemphasis on simplistic client/counselor process variables and disregard for significant cultural and culture-specific psychosocial variables that might impact counseling. In other words, important personal variables (e.g., learning and communication styles and/or patterns, racial attitudes and their manifestations, and living conditions) which are difficult to study but vital to understanding counseling with people of color have been ignored. Concomitantly, although heterogeneity exists *within* multicultural populations, *intra*cultural differences have not often been acknowledged in the research literature. Such information is particularly important for evaluation and delineation of research limitations, future directions, and methodological modifications for subsequent research.

Culture-Specific Instrumentation

Research in multicultural counseling has relied heavily on culturally encapsulated, typically paper-and-pencil psychometric instrumentation (Dana, 1993; Ponterotto & Casas, 1991). However, culturally-sensitive instrumentation is available and can be valuable tools for researchers. Examples include the Cultural Mistrust Inventory (CMI), which measures African Americans' level of trust of Whites and White-related organizations; African Self-Consciousness Scale (ASCS), which measures the degree to which an African American's beliefs, attitudes, and behaviors are affirming of African American life and cultural heritage; Racial Identity Attitude Scale (RIAS), which measures degree of racial identity for African Americans; Cross-Cultural Counseling Inventory-Revised (CCCI-R), which assesses the counselor's ability to work effectively with clients from diverse racial/ethnic groups; Modern Racism Scale (MRS), which measures White's racial attitudes towards African Americans; Value Orientation Scale (VOS), which assesses therapeutic components of counseling with Cuban Americans; and Acculturation Rating Scale for Mexican Americans (ARSMA), which measures degree of acculturation for Mexican Americans. Overviews of the psychometric properties of these instruments can be found in Ponterotto and Casas (1991).

In using psychometric instruments with racial or ethnic minority persons, researchers should follow the *Multicultural Assessment Standards: A Compilationfor Counselors* (Prediger, 1993) which was prepared by the Association for Assessment in Counseling, a division of the American Counseling Association. Described therein are culturally-appropriate uses of instruments and the importance of multicultural sensitivity when working with people of color.

Recommended Course of Action

Pedersen (1994) wrote that the future for multicultural counseling research requires a blend of culture and counseling. The first priority should be to advance conceptual and theoretical tenets for the interaction of culture and counseling beyond the diffuse and incomplete theoretical perspectives now available. Moving to new directions in multicultural research in counseling requires that theories be developed which extend traditional paradigms to encompass multicultural considerations. There is need to increase research efforts to identify primary variables that allow better explanation of what happened, interpretation of what is happening, and perhaps prediction of what will happen in counseling processes across cultures. In addition, viable in-the-field interventions for multicultural populations, rather than one time test administrations with readily accessible populations, would allow researchers to determine significant factors impacting people of color. Such approaches may necessitate smaller sample sizes and/or qualitative/case study research. However, these forms of research would reach and empower more people of color, thus resulting in significant information which would help counselors provide better services for people of color (Ponterotto & Casas, 1991). There is need to identify criteria for expertise in educating professionals to "work multiculturally" so that they are adequately prepared to help with the problems in a pluralistic society.

Conclusion

The counseling profession has always been on the cutting edge of teaching and research. Its theories and models have shaped how counselors interact with their clients and impact the lives of millions of people. However, many traditional approaches do not fulfill the counseling needs of multicultural populations. Development and implementation of new research perspectives, instruments, and designs would affect change for both clients and counselors. Thus, researchers who act, write, and report with cultural sensitivity would educate colleagues and support people of color. Research, counselor

preparation, and professional practice would then serve the projected social needs for the next millennium and at the same time advance the counseling profession (Gibson, 1992).

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Research in Rehabilitation Counseling

Donald C. Linkowski

Research in rehabilitation counseling is focused on persons with physical or mental disabilities and on systems and processes developed to enhance vocational rehabilitation and independent living. Rehabilitation counseling is concerned with individuals' adjustments to their respective disability, in all life areas, and in evaluating programs which promote those adjustments. It is concerned with the broader environmental context and how it fosters or impedes access to all areas of living, including medical and rehabilitation services, employment, housing, and social and recreational activities. In rehabilitation counseling, it is widely understood that disability is a characteristic of a person *and* of the environment. Thus, helping a person with a disability necessitates consideration of social attitudes, physical barriers, and available services which may impede or facilitate access. This perspective is inherent in the Americans with Disabilities Act (ADA) of 1990.

Rehabilitation counseling evolved out of counseling psychology and vocational guidance. As a professional specialty, it places high value on research and inquiry. It has developed a research base for the preparation of rehabilitation counseling practitioners, including the development of standards for program accreditation and rehabilitation counselor certification (Szymanski, Linkowski, Leahy, Diamond, & Thoreson, 1993). The rehabilitation counseling profession has received strong support from Federal legislation, including support for research (e.g., National Institute on Rehabilitation and Rehabilitation Research).

The development of this digest was based on a review of the articles published during the past ten years (1986-1995) in three primary journals: the *Rehabilitation Counseling Bulletin* (RCB), which is a quarterly journal of the American Rehabilitation Counseling Association (ARCA), a Division of the American Counseling Association (ACA); *The Journal of Applied Rehabilitation Counseling* (JARC), which is a quarterly journal of the National Rehabilitation Counseling Association (NRCA), a Division of the National Rehabilitation Association (NRA); and the *Journal of Rehabilitation* (JR), a journal of NRA. These journals were searched for review studies of sources, topics, and methodology of research in rehabilitation counseling. In addition, their indices and special issues were examined for trends in the field.

Overview of Rehabilitation Counseling Research

Elliott, Byrd, Nichols, and Sanderson (1987) found that the most significant publishing resources relevant to rehabilitation counseling were the JARC, RCB, and JR. Others, in descending order, were the *Journal of Counseling Psychology*, and the *Personnel and Guidance Journal* (now the *Journal of Counseling and Development*). Approximately 10% were from ACA journals, about 8% were from the NRA, and about 6% were from journals of the American Psychological Association. Since this study, *Rehabilitation Education* (RE), a journal of the National Council on Rehabilitation Education, has been developed. If the Elliott, et al. study were redone today, the RE would undoubtedly place in the top five.

Joiner, Saxon, and Bair (1987) studied of the types of research and occupational roles of authors in JARC, JR, RCB, and *Rehabilitation Literature* (RL) over a 5-year period beginning in 1979. They found that the JARC, JR, and RL contained significantly more (about 60%) conceptual and synthetic (e.g., meta-analytical) research than the RCB which contained more (59%) empirical research (e.g., descriptive, correlational, *ex post facto*, or inferential). The predominant occupation of the authors in all of the journals, except RL, was academician. The RCB contained more articles from persons identified as rehabilitation researchers than did any of the other journals. The occupational differences among authors were not statistically significant. Overall, practitioners, administrators, and supervisors averaged less than 10% of the authors. Here too, with the advent of *Rehabilitation Education*, these results would undoubtedly be different today since RE provides an additional outlet for publication by rehabilitation educators and researchers.

Several reviews of doctoral dissertation research have been reported in the RCB since 1981. Beck, Janikowski, and Stebnicki (1994) reviewed 225 rehabilitation-related dissertations which is a decline in the number of rehabilitation-related dissertations reported in a similar study two years earlier. The five major content areas of the rehabilitation studies, in descending order of frequency, were clinical intervention studies, professional issues, program and policy studies, predictive outcome studies, and attitudinal studies. An increase was noted in the number of clinical intervention studies with a decrease in family and outcome studies. Established university rehabilitation education programs contributed a substantial number of the dissertations, but a diversity of disciplines (e.g., allied health) have also contributed research to the rehabilitation field.

Shontz (1989), in a comprehensive review of research entitled, "A Future for Research on Rehabilitation and Adjustment to Disability," called for more integration of research, particularly the inclusion of different research approaches (e.g., case studies). He noted that although the research approaches used represent a spectrum from tightly-controlled, narrow laboratory studies to broad-based case studies with little control, all types are important, have something to offer, and should involve both researchers and practitioners; any one approach to achieve full understanding is impossible. Thus, many methodologies are necessary and useful for forwarding research agendas and contributing to effective practice if they are used in a balanced plan. Shontz (1989) further concluded that researchers must find where their projects fit in the methodological spectrum and understand how they contribute to the overall mosaic of research on a topic.

Szymanski (1995) further emphasized rehabilitation consumer involvement. Persons with disabilities must be involved in appropriate ways to add to the relevance and utilization of research. She introduced the concepts of multiple stakeholders and diversity in research, including consideration of disability, gender, and culture. These considerations must be *added* to the usual concerns about the validity of research procedures.

The Future of Rehabilitation Counseling Research

Where is the field of research in rehabilitation counseling headed? Some evident trends include more involvement by practitioners and persons with disabilities; use of a greater range of methods, including more emphasis on qualitative research; more team and/or collaborative research; and more use and study of technology including the use of resources such as the Internet or World Wide Web as both research tools and means of dissemination. Disabilities such as brain injury, HIV+, and AIDS present new challenges for research. In addition, rehabilitation approaches continue to find new forms (e.g., new social security incentives for employment, new interpretations of the ADA, and independent living innovations) which will need to be evaluated. There also will continue to be a focus on diversity, and cross-national studies in particular will add depth to understanding of how people respond to disability and rehabilitation.

Conclusion

Research in rehabilitation counseling is expanding to include many new as well as established approaches to inquiry, ways of knowing, and who is involved in determining how and what is known. Most of all, it is crucial that researchers, practitioners, and consumers all contribute to future rehabilitation counseling research processes so that it may be complete and fully successful.

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Research in Professional Practice: I

Glenda E. Isenhour

Although counselor educators emphasize the importance of research to students in counselor preparation programs, relatively few counseling practitioners engage in research activities (Johnson, 1994). Counselor educators strive to train research-practitioners. However, professional behavior concerning research generally does not follow what is advocated professionally. Unfortunately, only about 50% of professional counselors who identify themselves primarily as practitioners actually engage in counseling research (O'Brien, 1995). The situation is confounded further by Falvey's (1992) assertions that current counseling research has little relevance to clinical practice and that research efforts are generally wasted on trivial or simplistic questions. However, the counseling profession has entered the "age of accountability," which includes demands from policy makers, health care systems, and the insurance industry for relevant and useful research on counseling practices. Thus, the lack of research by practitioners about clinical practices is the "wolf knocking at the door."

The insurance industry in particular is aggressively seeking cost-containment measures because of skyrocketing health care costs. Relatedly, many policy makers view managed care and other cost containment initiatives as having great potential benefit for consumers in the form of lower premiums (Johnson, 1994). In response, counselors can no longer just say "we provide quality services." Legislators, insurance companies, health care providers, and consumers are demanding proof of treatment effectiveness and efficiency; professional claims must be bolstered by evidence (Filstead & Parrella, 1995). Treatment decisions based on what textbooks advocate no longer suffice. Counselors must be able to select treatments based on substantive and substantiated prediction of desired behaviors or desired outcomes. The counseling profession must identify what works for whom, and at what cost. Thus, the counseling profession is in urgent need of practitioners doing well-designed outcome studies that justify specific treatments (Johnson, 1994).

Practitioners as Researchers

In considering research possibilities, practitioners often are burdened by the perception that research plans, assessments, and methodologies must be overly complex; they perceive that research must follow models that are generally conducive only to specialized situations and which yield results that have limited generalizability. Thus, practitioners argue that clients receive greater benefit from counseling service than from research. In response, they typically conduct only clinical audits or quality assurance and utilization reviews. However, such activities yield results that are far less substantive than those required by social policy makers and the insurance industry. Without *evidence* that the counseling services provided are effective, there is no way to defend the services provided or to what extent, if any, clients actually benefit (Filstead & Parrella, 1995). Therefore, practitioners must re-identify themselves as both practitioners and researchers, and engage in data collection as a routine part of their clinical practice.

Getting Started

Usable demographic, descriptive, or clinical information are all part of routinely gathered information during clinical service. With a little forethought, practitioners can "standardize" data collections and thus create an effective beginning for research. Similarly, as part of their routine care provision, practitioners document treatment plans, the nature of treatments used, and how treatment is delivered. Additionally, practitioners routinely monitor and record how clients' symptoms change over time. Indicators of functioning (e.g., alcohol consumption during the past month or severity of depression in the past two weeks) also should be carefully recorded (Filstead & Parrella, 1995). These activities form the foundations of good practice *and* research.

Practitioners also can incorporate into their care-provision routines the use of consent forms for immediate and follow-up research activities. As an

example, permission to contact clients' significant others to obtain perceptions and self-reports of client behavior can be helpful. The use of well-established, valid, and reliable measurements (e.g., symptom checklists or personality inventories) as part of routine practice provides for credible data collection activities (Filstead & Parrella, 1995). Again, these activities are all a part of good research and practice. However, to begin, practitioners must define both the expected client outcomes and reasonable or acceptable measures of the indicators of those outcomes.

Recommendations

There are several issues that influence the participation of practitioners in outcome research and the concomitant usefulness of their findings. Development of useful research tools, from validated pencil-and-paper inventories to software programs, is imperative. Systematic and effective data gathering of clients' responses to treatment during routine clinical practice is essential. There is also a need to revise and/or consolidate robust clinical assessment instruments and procedures into briefer but still comprehensive assessment techniques (Smith, Rost, Fischer, Burnam, & Burns, 1995). The managed-care industry in particular is encouraging use of "standardized" treatment packages (personal communication, Jeri Davis, November, 1995) and the adoption of newer, better, and standardized measurements would facilitate more meaningful comparisons of results of independently conducted counseling efficacy and effectiveness research.

There also is need for longitudinal assessments of outcome. Studies that restrict follow-up assessments to less than a year do not really reflect changes that may only unfold across longer periods of time (Filstead, Parrella, Ross & Norton, 1995). Long-term changes are the real benefit of counseling and reflect the full effectiveness of counseling treatments delivered. It is only through longitudinal studies that counseling treatment effectiveness and cost efficiency will be determined.

Currently, the counseling profession needs to address two critical questions: "Does treatment work?" and "Who needs what?" However, a third fundamental and important question, which currently is not being addressed, is "Who got what,from what?" Although different clients may be exposed to standard treatments, even in a single program, not all clients receive *exactly* the same treatment. In a typical outcome evaluation, a uniform treatment experience for all clients is *assumed*. Thus, practitioners try to control for level of care and type of service. However, an often unconsidered factor is the differential experience of clients in treatment; clients who receive allegedly standard treatments may in fact receive treatment differentially. Motivational levels and degree of client participation in treatment are important variables to be examined. Process-analysis in the context of treatment-outcome evaluation expands the number of variables studied and greatly increases understanding of the treatment outcomes. It also may identify treatment effectiveness (Filstead, Parrella, Ross, & Norton, 1995).

Counselor educators should continue to stress the importance of research in the counseling profession. Concomitantly, counselors-in-training should learn that a commitment to the counseling profession is also a commitment to research because it is only through good research that clients can be assured of receiving the best care available.

Summary

The counseling profession is being compelled by the health-care system to conduct outcome research. Accordingly, mental-health professionals must confront the task of demonstrating accountability for their services (Falvey, 1992). Practitioner-conducted outcome research has important applications for both clients and practitioners within the health care system. Clients will be able to make more informed decisions about treatment and selection of services and practitioners will be better able to match clients to treatment protocols with high levels of outcome prediction confidence. Practitioner outcome research also introduces quality improvement into clinical practice, thus further facilitating and promoting more effective client care. Finally, practitioner-conducted outcome research and on-going program evaluation are important steps toward establishing professional credibility and accountability.

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Research in Professional Practice: II

Thomas W. Clawson and Douglas E. Guilbert

The recent widespread recognition of the counseling profession by other professions and the general public has been achieved in large part through successful activities such as counselor preparation program accreditation and counselor certification and licensure. However, despite the increased recognition, there continues to be increased pressure on the counseling profession to re-examine both counselor preparation and counseling practice as they relate to client outcome and cost effectiveness. As a result, the profession is being challenged to conduct more and better research.

Driven by the need to curtail the rising costs of mental-health care, a primary goal of managed health care has been to relate actual practices to successful outcomes. Thus, health-care managers seek to influence counselors to provide efficient practice. Managed health-care practices *evolved* from attempts to contain costs by restricting benefits; however, health care itself is focused on the effectiveness of services rather than the cost of a visit (Freeman & Trabin, 1994).

Eysenck (1952), in his historic research on the efficacy of psychotherapy, presented evidence that psychotherapy generally was ineffective. This finding may have influenced the counseling profession's efforts to initiate outcome research which associates practices with client outcomes. The results of outcome research generally have been positive, with the conclusion being that counseling *is* effective in helping people change at a faster rate and more substantially than they would through the so-called natural healing processes (Hill & Corbett, 1993). Yet, counselor training programs continue to be primarily theory and skills-based; they focus on skills development rather than the effectiveness of outcomes. Similarly, some counselor credentialing is based on the completion of academic and/or professional standards rather than demonstrated effectiveness. Thus, counselor trainees seek to master academic knowledge and basic skills rather than proven techniques. Counselor trainees are provided with a variety of models of interventions, but they are not prepared to identify which interventions are most effective for specific client situations.

Some researchers (e.g., Hill & Corbett, 1993) have suggested that having numerous counseling theories available in combination with the lack of evidence for outcome differences has helped the counseling profession move toward an integration of theories. They have suggested that common rather than specific elements of therapy are curative, thus implying that common elements, which have been derived empirically, work. Toward that end, the goal of outcome research must be to develop standards of practice by which counselors can efficiently and effectively intervene with clients. Some progress has been made, but much effort is still required.

New Directions

Accreditation of counselor preparation programs and counselor credentialing, along with the evolution of managed health care, gives rise to the obligation to also scrutinize what counselors actually do. For example, a significant recent description of the professional practice of counselors is the Work Behavior Analysis of Professional Counselors published by the National Board of Certified Counselors (NBCC, 1993). This study investigated the work of counselors through examination of the frequencies and importance of their various counseling and professional behaviors. The NBCC currently is conducting similar studies for counseling specialties including career counseling, clinical mental health counseling, and counseling for addictions. These work behavior studies mark a new and substantive direction in the study and articulation of counselors' professional practices. Such research is an important precursor to effective outcome research because counselors' behaviors must be known before their behaviors can be related to client outcomes.

Investigation of the need for mental health services is an important area for research. The publication *Mental Health in the United States* (Center for Mental Health Services, 1992) presented the first

widely inclusive study of mental health needs in this country. Although comprehensive in scope, that study, and others like it, included many client populations not usually served by counselors. Therefore, the counseling profession must continue to study client populations in general and those which are under or not served in particular. This information is essential to determine which counseling practices are most effective with various types of clients. In addition, the information derived from such studies is valuable for the determination of needed practices and directions in counselor preparation, accreditation of counselor preparation programs, and counselor credentialing.

The information currently available on counseling outcomes is disparate, scattered, and subject to considerable criticism. Needed are major, large-scale studies of counseling outcomes such as the one initiated in 1995 by the Center for Mental Health Services, a subsection of the National Institute of Mental Health. This landmark, five-part project is intended to determine client needs and the range of mental health services available within the managed mental health care system. The components of the study included investigation of mental health service coordination, communication with and among managed care providers, the current state of the labor force in the United States as well as projections, in-service (i.e., continuing education or training) needs of mental health care system administrators, and pre-service and in-service training needs of mental health service providers. Each of the major, recognized mental health service professions will have opportunity to provide information about the best uses of their respective practitioners within a managed health-care environment. This project is a seminal effort to obtain valuable empirical data from mental-health service providers that can be used by payers of treatment regimes. More importantly, however, it is a mandate to emphasize outcome research.

The American Mental Health Counselors Association recently created the National Commission for Mental Health Counselors (NCMHC) as a research entity intended to develop and/or collect substantive client outcome research in the counseling profession. The initial efforts of the NCMHC were a professional callfor more and better outcome research, the convening of a conference focused on outcome research, and the start of a longitudinal study on mental-health service-provider training practices as they relate to client outcomes.

The Evolving Managed Health Care Environment

There have been three identifiable approaches to managed health care in the United States. During the 1970s and 1980s, cost containment was the primary goal. A variety of design elements were introduced during this period, including annual and lifetime payment maximums, deductibles, outpatient co-payments, treatment and disorder exclusions, and monitored authorization (i.e., gatekeeping) to restrict reimbursements.

More recently, there have been attempts to improve value and quality by managing health care services rather than health care costs (Freeman & Trabin, 1994). New terms were introduced to reflect this perspective, including descriptors of health conditions such as necessary and appropriate, least restrictive, least intrusive, and qualified providers. This newer paradigm evolved from the previous model which was directed at managing benefits. Its intent was to provide the "right" care for the "right" people at the "right" time and in the "right" way.

The most recently introduced model seeks to manage health care through the advocation of wellness and through preventative management of disease and promotion of healthy lifestyles. However, this new model has not yet been widely accepted or implemented and needed public funding has not yet become available.

In general, changing health care philosophies are moving the health care system towards more precise predictions of costs, treatment outcomes, and service-provider competence. It appears that the goal is the ever-increasing control of costs through increased knowledge and more sophistication of pre- and post-care practices. Thus, managed mental health care is likely to be the strongest outside force to influence counseling research that the profession has ever experienced.

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Research in Counseling Supervision

L. DiAnne Borders

A startling paradox exists regarding the status of research on counseling supervision. Clinical supervision is almost universally considered a, if not *the*, pivotal experience in counselor trainee and practitioner development, yet there is relatively little empirically-based information about the nature, process components, or outcomes of this educational process (Borders, 1989). Based on a substantial body of research conducted over the last decade, it is clear that counselor development occurs in a reasonably predictable sequence. It moves from initial concerns about skill development in a rather dependent supervisee-supervisor relationship, to focus on the supervisee integrating personal and professional identities via a consultative supervision relationship (Worthington, 1987). However, critical questions about this developmental process remain unanswered.

Supervision Interventions

What a supervisor does is an important component of supervision success, and thus it would be assumed that various techniques (e.g., self-report, Interpersonal Process Recall, modeling, role playing, Socratic questioning, live observation, or live supervision) would be a focal point of supervision research. However, only three published studies investigating the relative effectiveness of various interventions are readily located, and they have yielded mixed results. The need for additional research is evident. Future studies need to be context-specific in nature because a technique used in supervision may be differentially effective depending on the supervisee's developmental level (e.g., beginner vs. experienced practitioner), counseling setting (e.g., elementary school vs. mental health agency), and/or client's issue (e.g., substance abuse vs. career concern). Given the contextual variance, equally important research questions are those concerned with *how* a supervisor chooses a particular technique for a particular supervisee during a particular supervision session as well as how the *choice* of technique should ensure maximum benefit (e.g., what topic or information is considered or given priority).

Supervision Relationship

Although it is clear that the supervisory relationship is highly valued by all supervisees, regardless of experience level (Bernard & Goodyear, 1992), there is no consensus about the critical components of the supervision relationship. Theoretical models have been borrowed from other fields (e.g., counseling) and applied by researchers for supervision. For example, social influence, working alliance, Rogers' core conditions, and interpersonal interaction (such as Penman's matrix of power and involvement dimensions) models have been used. However, these models do not adequately describe the dynamics in the supervisory relationship. That is, there have been too few attempts to determine relationship components specific to supervision. Thus, research is needed to differentiate relationship components unique to counseling supervision as well as those similar to other, seemingly related, interactions (e.g., counseling, teaching, consulting, mentoring, or parenting). Clearly, consideration of the supervision relationship context is needed in this research.

Group Supervision

Some authors have described "how I do group supervision" in the literature, but empirical support for any of the proposed models is scant. In fact, there is almost no empirical support for those benefits widely ascribed to group supervision (e.g., increased support, decreased dependency on supervisor, and collaborative learning), particularly in comparison to individual supervision (Bernard & Goodyear, 1992). This situation is ironic given that group supervision is typically required for counselor education program accreditation and for counselor licensure. Basic questions remain to be addressed, such as which dynamics are specific to supervision groups as compared to other types of groups, how learning occurs in supervision groups, and which supervisor

roles are appropriate.

Multicultural Issues

Leong (1994) recently edited a special journal section in which several authors suggested supervision research questions that draw from existing literature on supervision, counseling, and racial identity. However, research questions are only beginning to be formulated on the impact of various cultural, racial, and ethnic combinations of supervisor, counselor, and/or client. For example, it is unknown whether developmental models of supervision adequately describe stages of supervision for multicultural or interracial combinations, how multicultural issues affect the supervision relationship, or which supervision techniques are most effective in educating counselors to be sensitive to multicultural issues.

Supervisor Development

A natural component of research attention to the supervision process is a focus on the supervisor, i.e., the person primarily responsible for establishing the learning environment, choosing and implementing supervision techniques, leading the supervision group, and educating cultural-sensitive counselors. Clearly, knowledge about the development and functioning of supervisors is critical to the effectiveness of supervision. However, until recently, lack of supervisor training impeded research in this area. A professional "wakeup call" was Worthington's (1987) conclusion that supervisors do not improve with experience!

Obviously, research is needed to clarify the developmental transition from counselor to supervisor as well as what training components are effective in enhancing supervisors' growth. However, attention must be given first to specifying both performance and conceptual skills for conducting successful supervision. Unfortunately, such research is significantly hindered by the lack of psychometrically sound measures of supervisor competence.

Inherent Limitations

There are several explanations for the limited empirical basis for counseling supervision practices (Bernard & Goodyear, 1992; Borders, 1989; Holloway, 1992; Holloway & Hosford, 1983). For example, it is often difficult to obtain adequate research samples. There is a lack of substantive process and/or outcome measures for use in supervision research. Consequently, researchers frequently have relied upon self-reports of satisfaction and/or adapted counseling-based instruments for assessment of supervision outcomes. Both approaches are inherently inadequate (Borders, 1989). Measurement issues are clouded by lack of consensus concerning appropriate outcome criteria for supervision (Bernard & Goodyear, 1992).

Supervision research is further complicated by the complex nature of the process. For example, its triadic nature (supervisor-supervisee-client) presents numerous challenges for researchers. In addition, much of what happens in supervision is covert (e.g., supervisor and supervisee thought processes), interactive (e.g., mutual influences of supervisor and supervisee), and context-specific (e.g., varying client, supervisor, and supervisee needs). Thus, the nature of supervision process makes it difficult to measure important components of the process adequately and to measure them in ways for which the results are generalizable.

The appropriate choice of research design is problematic (Bernard & Goodyear, 1992; Borders, 1989). Analogue designs provide rigor, but may not generalize to real supervision sessions (e.g., supervisees report how they would respond to a videotaped supervisor with whom they have no actual interaction). Naturalistic studies introduce numerous sources of variance (e.g., the methods used to obtain data may be obtrusive or otherwise disruptive to the "natural" process) which may serve to limit the generalizability of the results. Therefore, researchers must make carefully considered methodological choices, ones based on equally careful consideration of their research questions.

Finally, given that supervision is an applied field, it may be beneficial for researchers to look to theories in other, related fields as a starting point for describing and explaining the supervision enterprise (e.g., cognitive science, identity development, transition theories, and social psychology; Bernard & Goodyear, 1992), as others have done (e.g., Holloway's use of Penman's classification system). Such an approach may provide informative, fresh perspectives on supervision. Researchers should be cognizant, however, that this approach may not reveal the full and/or unique flavor of the supervision process.

Conclusion

Despite a large body of supervision research, numerous important questions have yet to be addressed. Given the preliminary nature of research in this area, both qualitative and quantitative studies

(including both descriptive and experimental research methodologies) are appropriate and warranted. In sum, diligence, creativity, and collaboration are needed if researchers are to be successful in their quest to create a "science of supervision" (Holloway & Hosford, 1983, p. 75).

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Getting There from Here

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Survey Research Methods

Richard M. Jaeger

At first glance, surveys look simple. Just write some questions, ask some people what they know, think or believe (either verbally or by mailing them a questionnaire), count their answers, and write a report. As is true of most things in life, surveys are decidedly more complex at second glance. If you want survey results you can trust, you will have to exercise a good bit of care. Sound planning and careful execution of plans are critical to valid survey results. For a discussion of the essential steps in planning and conducting surveys, see Fowler (1993), Jaeger (1988), or Moser and Kalton (1972). Unfortunately, those details are beyond the scope of this brief introduction. We begin here with a discussion of the nature of survey research in comparison to an often-used methodological alternative—experimental research—and conclude with a discussion of prominent threats to validity in survey research.

The Nature of Survey Research, Compared to Experimental Research

Survey research is subsumed by a larger category of inquiry that social scientists call *field research*. The counterpart to field research is *experimental research*. Several characteristics distinguish field research and experimental research, but the most important difference concerns the kinds of actions taken by the researcher. In an experimental study, the researcher *does something* to the experimental units (the subjects or objects of the research) and then attempts to discern the results of his or her actions. The actions taken by the researcher are reflected in levels of an independent variable. The effects of those actions on the experimental units are measured in terms of one or more dependent variables.

An example of an experiment in the field of counseling would be the random assignment of subjects to three different types of therapy (e.g., Gestalt therapy, person-centered counseling, and reality therapy), followed by application of the therapies for a period of time and then measurement of the subsequent status of the subjects on such variables as anxiety, depression, or self-reported emotional well-being. The independent variable in this experiment would be type of therapy. The dependent variables would be the three measures of anxiety, depression, and self-reported emotional well-being). The fundamental assumption of experimental research is that differences in subjects' average status on the dependent variables can be attributed solely to the effects of the alternate levels of the independent variable.

In contrast to experimental research, a survey researcher doesn't *do* anything to research subjects, apart from asking them to provide information in response to questions. The objective of inquiry is not to determine how subjects responded to some treatment, but to determine the subjects' status with respect to particular variables of interest—such as their levels of knowledge, opinions, experiences, or judgments. While an experimental researcher intervenes purposefully in the lives of research subjects, a survey researcher attempts to minimize the effects of intervention, and to be as unobtrusive as possible in seeking information. The Heisenberg principle holds that the mere act of measurement inevitably affects the outcome of measurement. Acknowledging this principle, survey researchers attempt to minimize its consequences.

Both survey research and experimental research are fundamentally inferential. Just as an experimental researcher is rarely interested solely in the effects of alternative treatments on the particular subjects in his or her research study, the interest of a survey researcher is rarely restricted to the responses provided by sampled subjects. In both cases, the subjects used in the research are assumed to represent some larger population of subjects that is the true focus of inquiry. To clarify this notion, consider a poll concerning the intentions of registered voters on an upcoming election day. A survey research organization might conduct telephone interviews with 1500 registered voters, selected from throughout the United States. In analyzing and interpreting the

responses of these sampled voters to a series of questions, the organization will estimate the intentions of all 100 million or so registered voters in the United States. It would be of little interest to know how 1500 particular persons were going to vote on election day, but it is of great interest to know how all 100 million registered voters are going to vote. When interpreting the results of its survey, the researchers would make an inference *from* the sample of 1500 voters interviewed, to the population of 100 million voters in the United States.

In like manner, an experimental researcher infers that the observed experimental results will hold, not only for the sampled subjects who participated in his or her experiment, but for a larger population of subjects who could have participated in the experiment. Finding that the average level of self-reported well being is higher for the 20 subjects treated with Gestalt therapy than for the 20 subjects treated with person-centered counseling would be of little value if the researcher could not then infer that Gestalt therapy is more effective than person-centered counseling (at least in terms of average self-reported well-being) for some larger population of subjects who are "like" those who participated in the experiment. The definition of subjects who are "like" the experimental subjects would depend on how the subjects were selected and on their descriptive characteristics.

The form of statistical inference used most often in experimental research is called *hypothesis testing* It is a procedure that examines the validity of assumptions concerning the value of quantitative variables in some population of interest. An example would be the assumption that the average level of depression following ten weeks of therapy is lower for middle-aged men treated with reality therapy than it is for middle-aged men treated with Gestalt therapy. The population in this example is "middle-aged men." The dependent variable is depression.The independent variable is type of therapy.

In contrast, the form of statistical inference used most often in survey research is *estimation*. In the voting poll example used earlier, the survey researcher used the responses of the 1500 persons who were interviewed to compute estimates of the average response, or the proportion of responses that would have been of a particular type, had all members of the population of registered voters in the United States been interviewed. Again the inference is *from* the sample measured or observed (in this case, the sample of persons interviewed) to the population of interest to the researcher (in this case the population of all registered voters in the United States).

Threats to Validity in Survey Research

Making inferences in survey research is a form of generalization—*from* samples of persons who responded to survey questionnaires sent through the mail or samples of persons who participated in interviews, to populations of persons that are of research interest. Generalizations in survey research are of two types: statistical and substantive. Statistical generalizations are threatened by two types of errors: bias errors and random errors. Bias errors are systematic, as in the tendency for American adults, when interviewed, to overstate the number of recent elections in which they voted, understate their ages, and overstate their annual incomes. Random errors occur in surveys for a variety of reasons. Persons completing questionnaires occasionally mismark their responses. Interviewers occasionally record the wrong answer when an interviewee responds to a question. Perhaps most important, random errors occur because the average response of different samples of persons will differ when they are asked the same question. The more responses to questions vary from one sample of respondents to the next, the more likely it is that the average response of a sample of persons will differ from the average response of the population of persons that is of research interest.

Substantive generalization is threatened by many sources of error. Questions posed might fail to reflect the variables that are of research interest. For example, the series of questions on a self-report instrument might not be indicators of anxiety, even though the instrument is labeled an "anxiety inventory." Or respondents might misunderstand the- questions, or interpret them in a manner that is different from the intent of the researcher. If I ask you "Where do you live?" I might want to know whether you live in a city, in a suburb or in a rural area. But you might answer "In an apartment," thinking I want to know the type of dwelling you live in. Another threat to substantive generalization is lack of knowledge of the information requested on the part of respondents or their failure to respond honestly. The tendency of respondents to under-report their ages and over-report their incomes has already been mentioned. All of these considerations threaten the validity of inferences *from* the responses to questions posed to a sample of persons, to the broad generalizations we wish to make about the populations of persons who are the real focus of our

interest in survey research. Only care in planning surveys and meticulous attention to detail in conducting them can minimize these threats to the validity of survey results and interpretations. The following sources will help you learn how to plan and conduct surveys properly.

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Experimental Research Methods: Major Designs and Data Analyses

Patricia B. Elmore

Experimental research methods are employed when researchers want to experimentally control (i.e., directly manipulate) variables being studied. Although such control may limit the opportunity to study variables in actual counseling settings, the primary intent of experimental research is to identify salient variables which may later be transferred into counseling practice. Typically, the benefits of the research are thought to outweigh the limitations of the research.

Before discussing specific experimental research methods, it is necessary to define and distinguish between independent and dependent variables. Research studies are conducted in order to determine the effect of an *independent* variable, which is the one manipulated in an experiment, on the *dependent* variable, which is the variable of interest. An independent variable is usually some specific intervention (e.g., counseling treatment) believed to influence some characteristic or construct for a group of people. For example, a counselor may be interested in the effect of assertiveness training (the independent variable) on leadership ability (the dependent variable) among college women (the group studied). Researchers also may determine the effect of a status variable, such as gender, that is not experimentally manipulated on a dependent variable (Heppner, Kivlighan, & Wampold, 1992).

Experimental Control

When planning a study, a primary decision for the researcher is whether variation will be controlled experimentally or statistically (Pedhazur, 1982). The most elementary experimental design has an experimental and a control group. For example, the experimental group receives assertiveness training and the control group receives no assertiveness training, and then both groups are measured on leadership ability.

More complex research designs may be used to study a number of independent variables simultaneously in the same experiment. For example, a counselor may be interested in studying the effect of assertiveness training on leadership ability, using experimental and control groups, under two counseling modalities such as group and individual counseling.

An important characteristic of all experimental designs is random selection of participants from the population being studied *and* random assignment of participants to experimental treatments. In theory, randomization means that all characteristics of participants, other than the variable or variables being studied, are distributed relatively equally in each group so that the characteristics' effects are negligible. For college women as an example, it might be assumed that the effect of marital status, socioeconomic status, age, and other characteristics not studied are equally distributed among the counseled and control groups.

Many experimental designs measure one or more characteristics of the research participants prior to and following the treatment. If it is impossible to study the same individuals over time, another experimental method is to "match" (i.e., pair by measurable characteristics) individuals on a control variable or variables and randomly assign them to treatment groups. For example, if the results of other studies indicate that marital and socioeconomic status influence leadership, then participants can be matched on these status characteristics, with one of each pair randomly assigned to the assertiveness training and control groups.

Experimental control also involves the selection of participants to be studied. For example, if the counselor is only interested in generalizing findings of the assertiveness study to women, then only females should be included. Thus variability due to gender is "eliminated" by being "controlled."

When experimental control is impossible or unethical, statistical control techniques sometimes can be effective. For example, it would be unethical to assign women to assertiveness training based on conditions of spousal abuse and impossible to study

a large number of women at each age level from 18 years to 65 years. Therefore, such studies are prime candidates for statistical control techniques. In fact, many studies involve both types of control: statistical and experimental.

Experimental Designs and Statistical Analyses

Any discussion of experimental research methods must necessarily include consideration of appropriate statistical analyses (Glass & Hopkins, 1984; Hinkle, Wiersma, & Jurs, 1994; Pedhazur, 1982). Thus, following are some of the major experimental designs and data analysis techniques for them.

One Factor Designs

When two groups are compared, such as an experimental and control group, the simplest analysis is an independent *t*-test. If more than two groups are compared, then the appropriate analysis is a one-factor (or one-way) analysis of variance (ANOVA). The independent *t*-test and one-factor ANOVA are appropriate when the groups are mutually exclusive. These combined procedures are often referred to as between-subjectsdesigns.

Multiple Factor Designs

When two independent variables are studied simultaneously, a researcher can determine not only the effect of each independent variable but also their interaction. An interaction is the effect of one variable across levels of the other variable. For example, when three independent variables are studied simultaneously, the researcher can determine (a) the effect of each independent variable, (b) how the three interact, and (c) how each combination of two interact. These statistical analyses are called factorial ANOVAs and are considered between-subjects designs because different participants are in each cell of the experiment.

Repeated-Measures Designs

Often, researchers collect one or more measures from the same participants two or more times. These are referred to as within-subjects, repeated-measures, or matched-samples designs. The simplest case of a repeated-measures design is a dependent or correlated *t*-test in which one group is studied at two times. In the leadership example, participants could be measured prior to and following assertiveness training to determine the effect of training on leadership. Variability due to participants is completely controlled because the participants serve as their own control. If the number of time periods is extended, the statistical analysis is called a repeated measures ANOVA or a treatments-by-subjects design. When two or more within-subjects conditions are studied concurrently along with their interaction, the extension is analogous to the multiple-factor designs for between subjects.

Mixed Designs

The conceptual aspects of experimental design and statistical analysis appear to become increasingly complex, yet they only depend on the number and type of independent variables. Mixed designs include one or more between-subjects factors (i.e., variables measured on different participants) and one or more within-subjects factors (i.e., variables measured on the same participants) in an experiment.

Analysis of Covariance

Analysis of covariance is a statistical analysis technique that combines experimental and statistical control (Huitema, 1980). In the assertiveness training and leadership ability example earlier, analysis of covariance could be used to statistically control for initial differences in the frequency of spousal abuse or age. Although analysis of covariance is a useful statistical technique, it should be remembered that it cannot overcome the shortcomings of a poor research design.

Multivariate Designs

All of the statistical techniques described previously are referred to as *univariate* analyses because only one dependent variable (e.g., leadership ability) is analyzed. However, a researcher is often interested in extending the designs to more than one dependent variable. For example, a counselor could study the effect of assertiveness training on risk taking, self-esteem, and leadership ability simultaneously. If treatment and control groups are used, the appropriate statistical analysis is a one-factor multivariate ANOVA.

Conclusion

Experimental research is always used to help answer a research question, one which often can be thought of in the general form, "What would happen if...?" Questions of this form are perhaps the most significant in the helping professions. Thus, meaningful questions guide meaningful research—particularly experimental research.

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Experimental Research Methods: Factors Jeopardizing Experimental Designs

James W. Pickering

Hadley and Mitchell (1995) suggested a taxonomy of research methods which proceed from less rigorous methods such as descriptive approaches, to historical and action approaches, to experimental approaches that are more rigorous and address more complex questions. Use of experimental methods is indicated when the research question involves the idea of causality, i.e., whether changes in one variable cause changes in another variable (Hadley & Mitchell, 1995). Experimental methods also are used when the knowledge base will support experimental methods. The purpose here is to provide an overview of the characteristics and types of experimental research methods typically used in research.

Characteristics of Experimental Research Methods

Isaac and Michael (1981) identified the purpose of experimental research as investigating "possible cause-and-effect relationships by exposing one or more experimental groups to one or more treatment conditions and comparing the results to one or more control groups not receiving the treatment" (p. 52). They also identified seven characteristics of experimental research implied in their definition: (a) management of the predictor and criterion variables along with the conditions in which the investigation is conducted; (b) use of a control group; (c)attempting to control variance among the predictor and criterion variables; (d) internal validity; (e) external validity; (f) ability to manage multiple predictor, criterion, and extraneous variables; and (g) exercise of control which makes experimental research powerful (but also somewhat artificial) when applied to human subjects.

Hadley and Mitchell (1995) noted that experimental research methods are usually used to address questions of causality, which refers to whether changes in the criterion variable can be attributed directly to the predictor variable. Not all investigations seek to establish causality. However, whenever causality is among the questions included in the investigation, experimental research methods are recommended.

Predictor and Criterion Variables

There are two primary types of variables in experimental research (Hadley & Mitchell, 1995). The independent (*aka* treatment) variable is manipulated, managed, or administered by the researcher. The result of the manipulation is the measured or observed change in the dependent variable. While the terms independent and dependent variables have been used traditionally, the terms predictor and criterion variables are better descriptors, particularly in the context of experimental research. Predictor variables must be carefully chosen or designed to maximize differences due to their effects. Reliable and valid criterion variables must be selected or designed to accurately measure change caused by the predictor variables.

Controlling Variance

Kerlinger (1973) offered an often-cited mnemonic to define what is meant byvariance control in experimental research. *MAXMINCON* refers to *MAX*imizing the variance associated with the relationship between the predictor and criterion variables, *MIN*imizing the error variance associated with measurement of the criterion variables, and *CON*trolling extraneous variance attributable to other variables not included in the investigation. According to Kerlinger, maximizing the variance related to the interaction of the predictor and criterion variables requires designing the levels of the predictor variables to be as different from each other as possible. Minimizing the error variance is accomplished by controlling the conditions in which the investigation is conducted and choosing reliable measures of the criterion variables. Controlling extraneous variance may involve any of a variety of procedures, such as selecting a group of subjects who are homogeneous on the variable, randomly selecting

and assigning subjects to groups, or perhaps adding the variable to the investigation as another predictor variable.

Internal Validity

Internal validity refers to the level of confidence that the predictor variable(s), rather than an extraneous variable, produced the change found in the criterion variable(s). Hadley and Mitchell (1995), Heppner, Kivlighan, and Wampold (1992), and Isaac and Michael (1981) listed a variety of threats to internal validity including group composition, experimental mortality, history, maturation, practice effects, placebo effects, the Hawthorne effect, the John Henry effect, experimenter bias, demand characteristics, rater and observer effects, instrumentation, and statistical regression. For example, when subjects are selected because of group membership rather than being randomly selected, when subjects know they are part of an experiment and merely respond to receiving "special" treatment, or when the measuring instruments are not reliable and valid, it is doubtful whether the treatment variable caused the change in the criterion variable or whether it was caused by some other extraneous factor(s).

External Validity

External validity is the degree to which the results can be generalized to other populations. Hadley and Mitchell (1995), Heppner, et al. (1992), and Isaac and Michael (1981) described a variety of threats to external validity including initial population-sample differences, mortality, artificial research arrangements, pretest influence, and multiple-treatment influences. For example, generalization to other populations probably will be limited if the sample chosen is not actually representative of the intended population, if subjects who leave the investigation differ in some way from those who remain, if subjects studied in laboratory settings perform differently than they do in naturally occurring situations, if pretesting sensitizes subjects to the treatment, or if multiple treatments are administered to each subject. Managing threats to external validity involves attempting to insure that both the subjects and the context in which the investigation is conducted are appropriately representative.

Rigor Versus Relevance

Experimental research almost always results in procedural compromise because control of one type of variance may cause problems in attempting to control another type of variance. Gelso (1979) labeled this "the bubble hypothesis," referring to the difficulty which arises when someone attempts to place a decal on a window and a bubble appears. When the bubble is depressed in one area, it arises somewhere else. Gelso also discussed how experimental rigor is related to internal validity. Threats to internal validity are most easily managed in controlled laboratory conditions, but human behavior rarely occurs in tightly controlled laboratory situations and thus generalization is limited.

Summary and Conclusion

Experimental methods are often touted as the *sine qua non* of research in counseling. However, experimental research methods are not always the most appropriate to answer questions. Heppner, et al. (1992) stated that just as there is no uniform method of counseling, there is no uniform method for conducting research. They offered five guidelines to determine whether experimental methods should be used: (a) Does the professional literature support the use of experimental methods or is a less rigorous approach more appropriate? (b) Does the literature include a variety of research methods or have one or two methods dominated? (c) Are sufficient resources available to support the type of research method desired? (d) Can rigor and relevance be balanced to answer the research question? and (e) Can responses to the previous four guidelines be balanced with each other? Whenever experimental methods are preferred or recommended to answer the research question, the issues presented should be considered carefully in designing the investigation.

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Qualitative Research Methods

Silvia Echevarria Rafuls

Qualitative research as a field of inquiry transcends many disciplines and subject matters. It is multi-method in focus and involves interpretive, naturalistic, and descriptive approaches to study phenomena. Essentially, qualitative research focuses on understanding and illuminating meaning with an emphasis on discovery and description through open, reflexive, and interpretive methods. Interviewing, observation, document analysis, and visual methods, which may be used alone or in combination, are typical qualitative methods. The breadth and depth of combinations of methods and data sources facilitate triangulation, a desired feature which enhances confidence in the validity of findings. Qualitative research methods can be used by a variety of helping professionals in different specialties.

Interviewing

Interviewing is the methodology most commonly associated with qualitative research. It has a wide array of forms and a multiplicity of uses. Individual, face-to-face interviewing is the most common type, but interviewing also can be conducted in group interviews, telephone interviews, or self-administered questionnaires (Fontana & Frey, 1994). Interviewing within each format can be structured, semi-structured, or unstructured and conducted in brief sessions over minutes (e.g., market or survey research) or lengthy sessions over days, weeks, or months (e.g., process research or life histories).

Structured interviews include pre-established questions posed in a specific order with pre-defined response categories (Fontana & Frey, 1994). Usually, interviewers are briefed on procedure so as to be as consistent and neutral as possible. Rational responses take precedence over depth, breadth, and emotion. Structured interviews are used when standardization is important. Therefore, it may be less useful in counseling research when participants' meanings, uniquely personal experiences, and viewpoints are the desirable outcomes.

Unstructured interviews include loosely defined questions to track and explore what is meaningful to the respondent. There are no pre-determined questions or order of questions; the interviewer converses with the respondent as questions arise (e.g., as in ethnography). Rapport and understanding of respondents' experiences take precedence over precise data and pre-established, codable categories. Oral histories are examples of unstructured interviews used to gain understanding of respondents' experiences during specific time periods.

Semi-structured interviews lie between structured and unstructured interviews. Generally, they are conducted with specific topics in mind from which questions are generated. Questions are posed as broadly as possible and responses are tracked and clarified by the interviewer through reflective comments and follow-up questions (Snyder, 1992). For example, Snyder (1992) used semi-structured interviews in a study of college students' constructions of love in 10 areas, including societal and cultural influences of love experiences, commitment to partner, sexuality, past love relationships, and compatibility in terms of "real" and"ideal" love, among others. All areas were probed with all participants, but greater emphasis was given to those which the participants attributed more meaning. Snyder (1992) posed broad questions such as "I'm interested in learning how people think about love..." (p. 53) and then would clarify responses through follow-up questions such as "Could you say more about your reactions to being told that someone loves you?" (p. 55). Regardless of interview format, forethought concerning form, structure, and purpose of interviews are essential when using interviews in qualitative research.

Observation

Qualitative observation is fundamentally naturalistic in that it occurs within the context of

occurrences and experiences of those being observed. It draws observers into the phenomenological complexities and realities of the participants' worlds. The degree to which researchers get drawn in varies according to Gold's classic typology (Adler & Adler, 1987) which includes complete observer, participant-as-observer, observer-as-participant, and complete participant. Rather than approaching exploration with preconceived questions and measurements, qualitative observers search for concepts and categories that are meaningful to participants within their natural stream of everyday life.

Participant observation and open-ended interviewing are particularly useful when studying interactional processes such as those in working with couples, families, and groups. For example, Gilgun (1989) studied team decision making in treatment of incest by first making observations to familiarize herself with the treatment team and their viewpoints and interactions. Subsequently, she interviewed team members individually, conducted more observations and a group interview, and attended a planning meeting. Observation and interviewing took 18 months. Thus, such an approach may be well-suited for process research and extended programmatic efforts.

Document Analysis

Document analysis is commonly used in combination with other methods, but it can be used singularly for historical analysis. Documents analyzed often are official or personal in nature. Official documents may include client files, statistical reports, certificates, contracts, or licenses. Personal documents may include journals, memos, letters, field notes, books, or magazines. Personal documents require more contextual interpretation, which raises the possibility of multiple re-interpretations over time depending on readers and context. The relationship between content and context should be discussed by interpreters as they would discuss any personal assumptions, biases, or perspectives as researchers.

Used singularly, document analysis is a high-inference, hermeneutic approach through which a utilitarian and conceptual meaning from patterns in written material can be derived. For example, Harbert, Vinick, and Ekerdt (1992) examined implications of retirement on marriage as depicted in popular literature from 1960 to 1987. Their literary base included 19 magazines and 13 books which discussed retirement marriages. Content analysis was used for delineation of categories from which to classify texts and identified themes. The results included analysis of advice given to retired couples and comparisons between their findings and related results from other professional literature.

In combination with other methods, document analysis often provides triangulation of multiple data sources, such as when primary data (e.g., interview transcripts or participants' journal entries) are compared to interpretative data (e.g., researcher's journal entries, theoretical memos, or field notes).

Visual Methods

Visual modes of inquiry are popular in sociology, particularly in the forms of ethnography and documentary photography. They have not gained as much popularity within other helping professions, although visual methods are particularly helpful where images have greater impact than do words. For example, a method such as photo-elicitation interviewing (Harper, 1994) allows researchers to interview participants on their interpretations of images created by the researchers of the participants' world. This method has been used in studies of ethnic entrepreneurship, homeless children, migrant farmworkers, and studies of neighborhoods (see Harper, 1994). "Photo interviews" associated with participants' photographs also can be conducted.

Conclusions

Qualitative research methods are best suited for research intended to provide an understanding of processes occurring within particular contexts and of the beliefs and perceptions of the participants involved in the processes being studied. Thus, qualitative methodologists who utilize interviewing, observation, document analysis, or visual means must possess effective description and writing skills to permit readers to enter into and understand the situations being studied. Qualitative research is thus closely aligned with the work of counselors and therapists, and should be an integral part of their skills repertoire.

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Quasi-Experimental Research Methods

Jane L. Swanson

Introduction

A research design is a set of plans and procedures for studying a question of interest to the researcher. The type of design that a researcher chooses has clear and direct consequences for the conclusions that he or she can make about the results of the research.

Typically, a distinction is made between "true experiments" and "quasi-experiments." The primary difference is that true experiments include the procedure of *random assignment*, in which research participants are placed into different treatment groups, or a treatment and control group, in a random fashion. If new clients at a mental health clinic are assigned to individual vs. group therapy on an alternating basis, then random assignment has occurred. The advantage of random assignment is that the researcher can rule out most alternative explanations for any differences that occur between groups. If the clients in group therapy are found to improve faster than clients in individual therapy, then one can conclude with greater confidence that the differential improvement is due to the group treatment.

However, in many situations, random assignment simply is not possible, either because it is difficult to implement, or it is not ethical. A *"quasi-experiment"* is "an experiment in which satisfactory control of extraneous variables is not feasible under prevailing conditions, although a true experiment would ideally suit the project's mission" (Hadley & Mitchell, 1995, p. 462). Thus, a quasi-experiment represents a compromise, between the amount of control required for a true experiment and the constraints imposed by existing circumstances. Quasi-experimental designs are weaker than true experimental designs; however, the degree to which they are weaker depends on the type of design.

Issues in Using Quasi-Experimental Designs

Groups of participants in quasi-experimental designs are called "nonequivalent" because random assignment did not occur. These nonequivalent groups are likely to differ in many ways, other than due to the treatment. If all clients in the therapy group were from a community mental health center, whereas all the clients in individual therapy were from a private clinic, then any differences observed between group and individual therapy may be due not only to differences in treatment, but also due to *pre-existing* differences between the groups. The more one can say about how the groups compare on factors other than the treatment, the stronger conclusions that one can make about the effects of treatment.

Four types of validity affect all research designs: statistical conclusion validity, internal validity, construct validity, and external validity (Cook & Campbell, 1979). These types of validity affect the confidence with which a researcher can make inferences or conclusions about his or her results. Quasi-experimental designs are particularly prone to threats to internal validity. *Internal validity* "focuses on whether or not the manipulation of the independent variable was responsible for the differences found in the dependent variable" (Heppner, Kivlighan, & Wampold, 1992, p. 51). Internal validity is strong to the extent that the researcher has controlled other factors which may be "masquerading" as treatment effects (Kidder & Judd, 1986).

There are five main threats to internal validity. *Maturation* is any process occurring within participants that could cause a change in their performance, such as fatigue, boredom, growth, or intellectual maturation. *History* is any event that coincides with the treatment, such as major societal historical events, or minor events occurring during the course of the study. Instrumentation refers to changes in the measurement procedures, whether they are purposeful changes, or due to the researcher becoming more experienced or more careless. *Mortality* refers to the dropout of participants from the study, or the difficulty in recruiting participants for a control group. *Selection* is any nonrandom procedure of assigning or selecting participants for treatment and comparison groups.

All of these threats to internal validity can, and will, occur. For example, because quasi-experimental designs do not include random assignment, selection will always be a potential threat. However, the degree of selection that occurs can be more or less severe, and the researcher needs to address how much of a threat it might be.

Examples of Quasi-Experimental Designs

There are many types of quasi-experimental designs, and readers are referred to textbooks on research design for a full discussion of the range of available methods. This section includes some examples of weak and strong quasi-experimental designs.

Pre-Experimental Designs

Generally speaking, "pre experimental designs" are examples of research designs that are ineffective. Suppose a teacher was interested in whether 8th graders learned math better when taught in a socially interactive manner. She found that students held positive attitudes toward math at the end of the semester. This research design is referred to as a *one-group posttest-only design*. Because the dependent variable (math attitudes) is measured only after students have undergone the treatment (the new teaching method), it is virtually impossible to interpret whether any change has occurred. In addition, without a comparison or control group (students who have not taken the class or have taken a math class taught in the traditional fashion), it also is impossible to determine whether factors other than the new class, such as maturational or historical factors, have contributed to the positive attitudes.

Suppose instead that the teacher measured math attitudes of students in the new course, plus students who took a math course taught in a more traditional manner. This type of design is a *nonequivalent-group posttest-only design*, and it shares a similar weakness to the previous design: It is difficult to attribute any observed results to the treatment. For example, if students could choose the math course in which they wanted to enroll, then any differences could be due to selection. That is, students may have differed in math attitudes before the term began, not because of the new course. Neither of these designs include an assessment of any possible pre-existing differences.

A third pre-experimental method of examining the research question is for the teacher to measure students' math attitudes at the beginning and end of the semester within the new class; this is referred to as a *one-group pretest-posttest design*. This design is better than the one-group postest design because one can examine changes that might occur; however, the possible cause of change still is not clear.

Quasi-experimental Designs

The preceding three pre-experimental designs are difficult to interpret because of multiple threats to internal validity. Pre-experimental designs often can be converted to stronger quasi-experimental designs by incorporating some additional observations, thereby reducing or even eliminating some of the threats to internal validity. In a *pretest-postest nonequivalent control group design*, differences between groups before the treatment are assessed, giving this design a major advantage over the pre-experimental designs. In this case, the teacher measured math attitudes of students in traditional and new classes at the beginning of the term, and again at the end of the term. The teacher now can rule out pre-existing differences in math attitudes by comparing the two classes before the term began.

An *interrupted time-series design* consists of multiple observations both before and after the treatment. The strength of this design is that one can observe trends in the data before, during, and after the treatment, and directly examine whether maturation is a cause of observed changes.

Suppose the teacher measured math attitudes at the beginning of each year from 5th to 12th grade. If math attitudes are stable in grades 5, 6, and 7, but increase substantially in grade 8 when the new course is offered, then the teacher can make a stronger conclusion that the course influenced math attitudes. If, however, math attitudes consistently increase from grade 5 through grade 12, then any changes during grade 8 are more likely due to maturation than to the course.

Summary and Conclusion

The type of research design chosen for a study is often a compromise between what is ideal and what is practical. Quasi-experimental designs offer the researcher a compromise between true experiments, which require random assignment of participants, and pre-experimental designs, which do not allow confident conclusions. Well-designed quasi-experimental studies minimize threats to internal validity, so that researchers can make stronger conclusions about the results that they observe.

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Case and Field Study Research Methods

Sylvia C. Nassar-McMillan

The long-waged debate about the helping professions as science or art has included discussion of appropriate research methodologies. The "hard" sciences traditionally employ quantitative methods for experimental methodology in laboratories. Comparatively, the "social" sciences are often thought of as "arts" because of the additional use of qualitative methods, quasi-experimental designs, and field setting research. Regardless of perspective, however, the helping professions inherently involve people as service recipients (i.e., consumers). Therefore, it is appropriate to conduct helping profession research, be it science or art, within highly complex, existing social structures. Case and field study methods are well-suited for such research. It is sometimes appropriate to use both qualitative and quantitative case and field study research methods in tandem (McWilliam, 1991). However, researchers must be aware of the general purposes, characteristics, strengths, and weaknesses of these research methods in order to use them effectively.

Characteristics of Case and Field Study Research

Kerlinger (1986) described case and field study research as "nonexperimental scientific inquiries aimed at discovering the relations and interactions among sociological, psychological, and educational variables in real social structures" (p. 372). These social structures represent social "units," or cases, and can be comprised of an individual, group, institution, or community (Isaac & Michael, 1981).

A distinctive characteristic of case and field studies is intensity. Many experimental and quasi-experimental methodologies require large sample sizes to examine even a limited number of variables. Conversely, case and field studies examine only one social unit (case), often while examining a large number of variables or even a total unit, element, or event (Isaac & Michael, 1981). Case and field study research can be employed to test hypotheses, but often are used instead for exploration of significant variables or the relationships between variables.

Advantages and Disadvantages

The foremost characteristic of case and field study research is its reality base. Although laboratory and other experimental settings generally attempt to simulate real-life characteristics, they often do not. Case and field study research implies a non-laboratory, non-experimental setting, and requires instead a true-to-life setting. However, the realism of the methodology also may hamper its effectiveness. The "realness" exposes the research to a wide array of potentially mediating variables in each situation. This "noise," so to speak, prohibits integrating an experimental component into case and field study research. The main obstacles to substantive results are first the potentially large number of variables which may impinge upon results, and second the potentially large variance within the variables themselves.

As noted, case and field study research can be used to explore relationships among variables. These explorations often serve as catalysts for later and possibly more systematic studies. Through the identification of potential variables of interest or new hypotheses, logical methodologies for inquiry also might be indicated. In the event that these later methodologies yield quantitative results, the case and field study research results provide rich supplement via anecdote or illustration (Isaac & Michael, 1981).

Another concern is related to the small size (i.e., "unit") in case and field study research. Because of the unique characteristics of each "unit," generalizability to other, even similar units is limited. Researcher bias can result from studying a single unit; a researcher may unwittingly form an inaccurate perception of the situation. Finally, issues of feasibility can create disadvantages, including availability of sample, cost, and time, although such issues are present in all research methodology.

Group Interviews as a Case and Field Research Tool

Interviewing is a qualitative research method which exemplifies case and field study research. It is used to gain insight into concepts beyond the clearly observable. Interviews range from highly structured to relatively unstructured. For example, if the goal is to test hypotheses, the interview(s) need to be relatively structured. Conversely, if the goal is to generate hypotheses, less structure promotes optimal conditions.

Interviews can be conducted with individuals or with the group as a whole. In either case, group members represent the unit of study. Group interviews are helpful in gaining information from a much larger unit or case. Various types of groups can be effective, depending on the desired outcomes.

Types of Group Interviews

Stewart and Shamdasani (1990) compared five different group techniques. Included are nominal, *Delphi*, brainstorming, synectics, and leaderless discussion group techniques. The nominal group technique is where group members never actually meet. Each member is interviewed separately, but their inputs are subsequently processed collectively. A summary of the process is then shared with each group member and additional input is solicited. It is possible for the group members to be assembled, but interaction is prohibited to prevent bias from undue peer pressure or excessive conflict.

The *Delphi* technique is similar in structure to the nominal group in that it is rare for the group members to convene. The purpose of this type of group, however, is specific to forecasting a trend or other phenomenon. The key tasks are to select an appropriate panel of experts as group members and to strategically design the interview questions.

Brainstorming is a tool used primarily to generate ideas. A group engaged in brainstorming may or may not have a facilitator. The goal of this process is to generate an array of ideas. In it, members are prohibited from censoring ideas on the basis of feasibility issues such as cost, logistics, etc.

Synectics is used to generate ideas and creativity. This technique involves a facilitator who moderates the group discussion by asking the members to focus on solutions rather than the problem. The use of analogy, metaphor, or role-play, combined with a pact for noncritical feedback to peers, leads to an end result of innovative ideas.

Leaderless discussion groups are used to analyze communication patterns within organizations. A group is given either a general or a specific task and is observed while conducting the task. Observers code and record member behavior. The data are then processed to determine roles of various group members, communication flow, and other interactional information.

Finally, focus groups serve as an effective and valuable tool. In them, group interviews focus on a small number of topics. The facilitator ensures that the group discussion stays on the appropriate topic. Focus groups are highly adaptable to a variety of research needs and goals. For example, applications to institutional research are found in Brodigan (1992). Important focus group characteristics to be considered include the number of members in each group and the nature and structure of the interview questions to be used.

Considerations in Conducting Group Interviews

Regardless of the type of group, several issues must be considered. First, the research question(s) must be established carefully. Are they exploratory or confirmatory? What type of group is indicated? How many groups are necessary to obtain data with as little bias as possible yet allowing for maximum generalizability? Who will be group members? What is the sampling frame and how will the members be recruited? Who will be the facilitator and what will be the facilitator's involvement? In other words, what will the group's agenda be? How much structure will be imposed? Where will the interviews be conducted? Who will observe? How will the data be coded? And finally, how will the resulting information be analyzed and used?

Conclusion

Case and field study research has an important place within the research realm. Because of the reality base, "actual" variables and their interrelationships are observed. Group interviews are a useful tool in conducting this type of research. They permit a combination of both observation and individual interviewing, which are commonly used qualitative research methods. Also, being highly adaptable, they can be used for a variety of purposes, are self-contained or are used in conjunction with other methods. Because the "helping professions" help people, case and field study research tools can be highly effective methods of exploring *real* relationships among individuals, groups, and/or institutions.

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Descriptive Research Methods

Craig S. Cashwell

Research texts often provide limited coverage of descriptive research methods. Heppner, Kivlighan, and Wampold (1992) suggested the reason is that such methods do not fit the "pure science myth" (p. 194), as compared to true experimental designs wherein variables are manipulated and controlled and thus are touted as the "best" method of scientific investigation. However, true experimental designs often involve variables that are not well understood or are limited in utilitarian value. In fact, descriptive research allows researchers to understand many variables more fully and to develop more worthwhile and useful studies. Thus, counselors need to be aware of the important place that descriptive research holds in the process of scientific inquiry and to work more often within a framework of description and discovery (Greenberg, 1986).

What is Descriptive Research?

Descriptive research involves observation and description of variables as they are distributed throughout a population (Crowl, 1993). Quality observation (i.e., measurement) is at the heart of descriptive research (Heppner et al., 1992). Generally, descriptive research designs may be classified as either qualitative or quantitative.

Qualitative Descriptive Designs

Qualitative research designs, drawn from anthropological field research methods, depend on the written or spoken words and/or observable behaviors as data sources (Bloland, 1992). There are several prominent types of qualitative research.

Naturalistic-Ethnographic research involves observation and description of phenomena within a specific context (Wiersma, 1995). That is, research is conducted in a "natural setting" such as a classroom or a counseling center; the principle data collected are usually field notes. The purpose of naturalistic-ethnographic research is to observe and document what occurs in the setting without manipulating variables or imposing structure. Limited generalizability of results is an inherent weakness of naturalistic-ethnographic research. However, naturalistic-ethnographic researchers are not concerned with issues of generalizability, but rather focus on providing context for data. The emphasis is on observation and description of what occurs without pre-conceived hypotheses. Such research may generate hypotheses throughout the data-collection process and/or focus observations around these hypotheses (Wiersma, 1995). While there is not control over extraneous variables as in analogue research, some (Smith & Glass, 1987) argue that it is the "naturalness" that enhances the validity of such research. Phenomena are observed and documented within a specific environmental context. Analyses may involve some quantification, such as proportions or percentages, but primarily rely upon qualitative descriptions of the phenomena of interest.

Phenomenological research is similar to naturalistic-ethnographic research, but focuses on gaining participants' understandings of their environments, involvements, and experiences. Thus, for example, phenomenological researchers in counseling typically collect data by interviewing group members and facilitators to try to make sense of how they experience the group process. "Bracketing" and "horizontalization" are important in order to minimize researcher bias. Bracketing is the deferment of the researcher's personal prejudices and biases so as not to impose structure in the interview. Horizontalization involves treating all data as if it were equally important, thus avoiding the tendency to overemphasize data consistent with the researcher's preconceived notions (Heppner et al., 1992).

Quantitative Descriptive Designs

Quantitative descriptive designs yield numeric or statistical descriptive data about how variables are distributed among members of a population (Crowl, 1993). Quantitative descriptive designs include surveys, classification research, passive designs, and *ex-post facto* designs.

Survey research has as a basic goal the collection of information about variables or phenomena within a population through use of interviews or questionnaires (Heppner et al., 1992). It is likely the most prevalent methodology in educational research (Wiersma, 1995). Survey research may be *longitudinal* (i.e., data collection over time at specified intervals) or *cross-sectional* (i.e., data collection at one point in time from samples representing a population). Although differences between defined groups (e.g., 16 and 18 year olds) in cross-sectional designs may be indicative of developmental differences, longitudinal designs are considered superior in measuring change over time.

The validity of survey research methodology is of critical importance. Heppner et al. (1992) delineated four major tasks in the conduct of survey research: (a) matching the survey design to the researcher's questions, (b) defining the sample, (c) selecting and developing data collection methods, and (d) analyzing the data. When interview methods are used, it also is necessary to develop interview protocols and establish acceptable levels of interrater and intrarater reliability. Questionnaire surveys should be pilot-tested to detect instrumentation problems. Common limitations of survey research include failure to allocate sufficient time and resources, improper sampling, inadequate measurements, nonrespondent bias (i.e., how nonrespondents differ from respondents), and failure to consider the sources of nonresponse that may lead to overgeneralization of results (Wiersma, 1995).

Classification research is used to develop categories, subgroups, or a taxonomic system to simplify a data set (Heppner et al., 1992). Two commonly used classification strategies are factor analysis and cluster analysis. Factor analyses yield common dimensions underlying a set of variables. They may be exploratory or confirmatory in nature. Exploratory factor analyses specify no *a priori* dimensions while confirmatory factor analyses test an *a priori* model of dimensions and items that will load on each dimension. Cluster analysis is used most often to place people into distinct, homogeneous subgroups that differ in predictable ways from other clusters so that individual differences can be examined (Heppner et al., 1992).

In *passive* descriptive designs, researchers examine relationships between two or more variables, without forming groups or conditions, through random ornonrandom assignment and without manipulating independent variables (Heppner et al., 1992). Passive designs include correlational designs, multiple regression designs, and *ex post facto* designs.

Correlational designs are used to indicate the predictability of one variable from a second variable (Tuckman, 1988). Researchers collect data on two variables and then correlate them, often by computing the Pearson product-moment correlation coefficient. A limitation of correlational designs is that causal relationships cannot be firmly established. However, causal relationships may be ruled out if a non-significant correlation between the variables is found. Another limitation is that "convenience" samples are often used, thus limiting the external validity of results (Heppner et al., 1992).

Multiple regression designs allow researchers to examine relationships among more than two variables; i.e., to study the separate and collective variance contributions of the independent variables to the variance of the dependent variable (Heppner et al., 1992). The squared multiple correlation coefficient represents the proportion of the variance of the dependent variable explained by the independent variables (Pedhazur, 1982).

Finally, in *ex post facto* designs, researchers examine the effects of a naturally occurring treatment after it has occurred and relate the result to an outcome measure (Tuckman, 1988). Predictable relationships obtained do not necessarily mean that the variables are causally related; the results may be chance occurrences (Heppner et al., 1992; Tuckman, 1988). At best, *ex post facto* designs provide information that may suggest that variables are causally related, but causation cannot be definitively ascertained from them.

Conclusion

Descriptive research designs play a significant role in counseling research. More thorough understandings of variables, and therefore of people, are made possible by descriptive research. Finally, the various descriptive designs contribute to the knowledge underlying the counseling profession by enhancing the foundations for experimental research.

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Historical Research Methods

Vernon Lee Sheeley

Historical research methodology, the process of historiography, has been and is of significant value to counseling professionals (Seldes, 1985). For well over 2000 years, historical research has been the interest, passion, delight, and consolation to some of the richest minds in science. Seldes (1985) identified numerous scholars who were zealous in their search to find historical data, record deeds, and praise famous people, as well as recognize movements, epochs, nations, and civilizations of the past. The "learning" came from where they were in time and place and was gained from recorded stories of happenings and involvements (i.e., history). Each made strong cases for the usefulness of history through reconstruction and interpretation of what had happened. The results were considered to be extremely useful to society in explaining the past and helping to predict the future. Included among the historical scholars presented is one who is well known in the counseling profession: Sigmund Freud.

Historiography

Historical research methods should follow a systematic process called historiography. However, because the steps involved in conducting historical research are essentially the same as those in other types of research, there doesn't seem to be any single, uniquely definable method of historical inquiry (Schumacher & McMillan, 1993). Generally, the first step in historical research is to identify a research problem, topic, or subject, followed by the formulation of hypotheses or significant questions to be addressed.

Appropriate historical research topics or problems cover a variety of areas in counseling and therapy, such as pioneering professionals, influences, events, ideas, issues, movements, theories, philosophies, practices, or institutional programs. As background knowledge is obtained, the problem may be defined more exactly; that is, a clear statement of the problem delimits and focuses the research study. To help phrase the research topic, historical researchers should read widely in primary and secondary sources to obtain breadth of understanding of the subject. Subsequent steps include the systematic collection and evaluation of source materials and a synthesis of information, respectively. These steps are integrally related and typically involve continued reformulation and revision of hypotheses.

To objectively evaluate the data, both internal and external criteria are applied to establish the validity, credibility, and usefulness of source materials. The application of external criteria helps establish validity; for example, if the source of information is not authentic, it cannot be used. Application of internal criteria helps establish meaning; for example, what is the nature and extent of the source material, and what does the content mean?

The final steps of historical research include analyzing and interpreting evidence from each source, synthesizing information from the various sources, making generalizations, formulating conclusions, and confirming or disconfirming hypotheses.

The historical research process is analytical because logical induction is the primary method used. The process is viewed primarily as qualitative in nature, although quantitative methods such as computer-assisted content analyses may be applied.

When Is Historical Research Useful?

Although most counselors, therapists, and researchers in the helping professions focus on conducting experimental and quasi-experimental studies, there are notable exceptions. For example, Engels (1980), Gladding (1985), and Heppner (1990) all noted exemplary, high-quality historical works in the counseling literature that present historical overviews of trends, important events, philosophical and theoretical developments, and research directions in those disciplines. Engels (1980) also offered a rationale for historical study of personalities, events, and ideas to explain the growth and evolution of the counseling profession. An example cited was *Counseling and Guidance in the Twentieth Century* by Van Hoose and Pietrofesa (1970), a book of

personalized, autobiographical sketches of influential persons in the counseling profession.

Gladding (1985) cited a number of books, journal and newsletter articles which reflected on how history has bearing on the counseling profession. With more attention by counselor educators to the history of the counseling movement and influential persons within it (e.g., leaders of professional associations), Gladding predicted that counselor preparation programs would "grow in a qualitative manner that ensures an examination of the entire field of counseling" (p. 330).

Another significant example of historical research is found in an American Counseling Association (ACA) book that highlighted early pioneers whose involvement and contributions influenced the growth and development of the counseling profession. Contained in this book (Heppner, 1990) are articles from the ACA's *Personnel and Guidance Journal (PGJ)* series entitled "Pioneers in Guidance," which began in 1975, and the sequel series entitled "Life Lines: Interviews With Pioneers in Counseling and Development" from ACA's *Journal of Counseling and Development* (formerly the *PGJ*).

Recommended Action

Engels (1980), Gladding (1985), and Heppner (1990) suggested that historical research in counseling provides rewards, values, and pleasures. They noted that new dimensions to life are added by extending perspectives and enlarging experiences through understanding history. Historical research permits one to enter to the past and embrace the nature of the counseling profession's existence. Historical research allows comparison of the "then" and the "now." For example, historical research allows readers to know current personalities and their predecessors more intimately through reading their letters, journals, and stories. Historical research allows a blending of the past with the present, thereby allowing better speculation about the future both in terms of what will be and what should be.

The historical researcher is enlightened by contemplation of the diverse behaviors which others confronted in the past. Thus, historical researchers gain knowledge of themselves and their professional environments which in turn leads to a better understanding of effective behaviors in the present. By analogy, individuals can only truly know themselves by knowing their past; a profession knows itself only through effective knowledge of its history.

Summary and Conclusion

Historical researchers work with the past by searching for, rather than producing, new data. Histography is a systematic process; it leads from identification of research problems to the formulation of conclusions. Much of what happened in the past remains submerged and implicit, even with the best historical inquiry. However, having a better understanding of persons, places, things, and events in the helping professions can contribute to the future quality of personal and professional lives.

Historical research in the helping professions is an alternate method available to thinkers and writers who envision a quality future, both for others and themselves. While the knowledge gained through historical research methods may not be as structured as that obtained from other methods, it is a legitimate and useful method of gaining knowledge.

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Developmental Research Methods

James O. Fuller

Development, a process whereby new form or organization emerges from prior, similar forms (Valsiner, 1989), involves transformation of the structure of organisms as they interact with their environments. DeCasper (personal communication, Fall 1988) described this transformation as the result of the interaction of genotype (the genetic material) with phenotype (characteristics of the individual that can be measured, such as anatomy, physiology, or behavior), and environment (the milieu in which development occurs) over time. Within such a perspective, developmental research focuses on transformation or change that can be observed over time (Mason & Bramble, 1989).

Developmental research in the counseling profession is concerned primarily with changes in people. It usually addresses whether people in an identifiable life period are systematically similar to, or different from, people in other periods of life. Examples of appropriate developmental research questions include the following: Are high-school adolescents more or less able to reason abstractly than middle school students? Are middle-aged adults more concerned than adolescents about the world economic situation facing next generation? How do levels of self-esteem among elementary school students compare to those among college students? However, the "organism" of interest in developmental research can be program outcomes, institutions, organizations, or systems.

Purposes of Developmental Research

Developmental research is conducted to (a) identify origins of behavior in order to understand how cognitive, affective, and physical functioning unfold (Hopkins, 1980), (b) establish the developmental function(s) of a behavior or trait (Bornstein & Lamb, 1984), (c) clarify interrelationships among factors that affect human growth and development, (d) examine the temporal stability of a trait over time, (e) search for sequences in and patterns of factors that influence growth, and (f) clarify historic trends in order to make predictions (Bornstein & Lamb, 1984; Hopkins, 1980). Understanding behavior and/or trait origins and functions, interrelationships, sequences, patterns, and trends through developmental research allows counselors and human-service organizations to better serve their respective constituencies (Hopkins, 1980).

Conducting Developmental Research

There are two general and widely used approaches to conducting developmental research: longitudinal studies and cross-sectional studies. *Longitudinal studies* involve collecting baseline and follow-up data and then comparing the results from the different times of assessment (Cates, 1985; Hopkins, 1980). This approach allows the researcher to describe phenomena such as differences and similarities in behaviors or traits, at different age levels, for the same people. If differences are noted between the initial and subsequent datacollections, there is evidence of developmental change (Newman & Newman, 1984). Longitudinal studies can be conducted with (a) samples from a large general population, (b) a subsection of a specific population who experienced the same event within the same time interval (Nesselroade & Bates, 1979), or (c) panels in which the same sample of cases is observed at more than one point in time (Nesselroade & Bates, 1979). Panel designs are a combination of cross-sectional and time-series approaches where measurements of one or more variables are obtained on a cross-section of a general population at each time of measurement (Cates, 1985).

Another commonly used longitudinal design is trend analysis (Cates, 1985), which involves data collection and analysis to determine the nature and direction of change in order to "predict" future events. The results are intended to be useful for extrapolation; statements are made based on theoretical extension of actual data (Hopkins, 1980). With trend studies, data are obtained from samples of a large population over time and analyzed to determine patterns of change or stability. Typically, trend studies focus on behaviors or traits such as

beliefs, values, activities, levels of awareness, or demographic characteristics (Cates, 1985).

Cross-sectional studies involve collecting data once, across different groups of subjects. Often the different groups represent different ages (Cates, 1985; Hopkins, 1980). This method permits the description and/or comparison of group means and other characteristic data for several groups simultaneously. If differences across age groups are noted, development differences can be inferred but not proven firmly (Newman & Newman, 1984). The significant advantage of cross-sectional studies is the reduced time frame needed to conduct the research (Hopkins, 1980).

Limitations to Developmental Research

There are several limitations in developmental research. Although longitudinal research yields a convincing picture of change over time (Bornstein & Lamb, 1984), it is costly in terms of time, effort, and required resources. Cross-sectional research is much less costly than longitudinal research, but it is subject to contamination from sampling error and socio-cultural changes over the period of time of the research (Bornstein & Lamb, 1984).

Developmental processes can be thought of as either unilinear or multilinear. Unilinearity assumes that all individuals develop in essentially the same manner. Multilinearity affirms the principle of equifinality, thus allowing for the possibility that individuals may develop in many different ways and yet achieve the same developmental outcome (Valsiner, 1989). Cross-sectional research includes the risk of overlooking different developmental pathways that subjects may take between measurement points, thereby missing significant developmental processes.

Two potential problems in all forms of developmental research are attrition and the subjects' socio-historical context prior to the implementation of the studies. With the latter, there may be important differences in the participants before studies are begun to which results could be attributed. Such differences may result from sampling problems (e.g., sampling bias) or latent developmental changes (Bornstein & Lamb, 1984). Therefore, it is essential that sample homogeneity is established before developmental research is conducted.

It is usually assumed in developmental research studies that participants share a common history (i.e., period of development before the research). However, individual abilities, educational attainment, or work qualities, may be unique products of their pre-research development. Thus, historic events and/or context may have a profound impact on subjects' attitudes, perspectives, achievements, and other characteristics. Researchers conducting developmental studies need to investigate as many potentially mitigating factors as possible.

Although attrition is a problem for all types of developmental studies, it is particularly acute for studies involving small samples. If participants dropout, the remaining sample may not represent the original population from which the sample was drawn. Obviously, the smaller the original sample, the greater the likelihood of problems associated with dropout behavior (Cates, 1985).

Trend analyses have similar potential shortcomings. A major drawback of trend studies is the use of extrapolation; extending the observed direction of phenomena. Being inattentive to all potentially influencing factors risks incorrect interpretation of a predicted direction. In addition, changes beyond the control of the researchers may occur. For example, the outcomes of certain events during one historical era may or may not be valid predictors of what will happen under similar circumstances in the future. Social phenomena, political changes, culture variations, and other environmental factors are but a few factors that may influence predicted results (Newman & Newman, 1984). Predictions based on trends can be trusted only if the conditions remain relatively constant throughout the time of the prediction. Therefore, greater contextual information about why a trend developed results in more accurate predictions. Predictions from trend analyses should be kept general and short-ranged. However, if changes in the contributing factors can be forecasted, the predictions can be modified and extended accordingly.

Conclusion

Developmental research studies may facilitate important understanding of traits, attributes, and behaviors at different ages and across the human lifespan. Thus, counselors and other helping professionals have been able to use developmental research to provide better, more effective services. The problems with developmental research are not insurmountable. In particular, longitudinal research can be strengthened by replicating studies with different samples and at different times such as in cohort sequential research designs that repeat a longitudinal study with a new cohort. Cross-

sectional studies can be strengthened by using a cross-sequential design wherein data are obtained from each subject during at least one follow-up assessment (Bornstein & Lamb, 1984). Replication is key to reducing the effects of confounding variables and, therefore, to obtaining more accurate results.

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Associational Research

F. Robert Wilson

Research, other than *truly* descriptive research, is the investigation of relationships. As Kerlinger (1986) noted, "Relations are the essence of knowledge. What is important in science is not knowledge of particulars but knowledge of the relations among phenomena" (p. 55). Thus, the search for relationships undergirds both experimental and nonexperimental research. The interest in each case is in discovering whether variables covary with others, irrespective of whether any variable is manipulated (Cook & Campbell, 1979). Associational research is a term that effectively describes much research within this perspective.

What Is Associational Research?

Associational research is the study of the relationship between two or more variables about which data have been collected through *passive* observation. It is distinguished from experimental research in that variables in associational research are not manipulated by participant assignment to various treatment conditions. Associational research is often referred to as correlational research (c.f., Cozby, 1981; Skinner, 1984), a misnomer (Cook & Campbell, 1979). The crucial difference between experimental and associational (nonexperimental) research is not the data analysis technique used, but rather the use of experimental manipulation in the former (Kerlinger, 1986). It is more descriptive to refer to investigation of relationships among variables under nonexperimental conditions as associational research (*a la* Sullivan, 1972).

In associational research, when the intact groupings of the variate are nominal in nature (i.e., groups among which there is no implicit order) or, though orderable, are small in number, the research question is typically framed in terms of differences between groups. Conversely, when all variables under investigation are continuous, the research question is usually phrased in terms of relationships (e.g., correlation) among variables.

When are Studies of Association Useful?

Some variables typically are not manipulable, e.g., age, gender, or level of intelligence. Clearly, assignment of participants to levels of variables such as these is impossible (Cook & Campbell, 1979; Kerlinger, 1986). Other variables (e.g., events which cause suffering) although theoretically manipulable, are not manipulated because of ethical considerations (Cook & Campbell, 1979; Kerlinger, 1986). Associational methodology also is appropriate when time is the variate of interest (Rosenthal & Rosnow, 1984); for example, individuals cannot be randomly assigned to age, school grade, or maturational level. Further, in repeated trial designs where a treatment (e.g., a counseling or training intervention) is administered over repeated applications (e.g., sessions or lessons), insight or skill development over time must be considered a question of association. Finally, because experimental studies cannot be conducted retrospectively, study of correlates of prior events to current ones must be associational (Cook & Campbell,1979).

There are occasions when, although experimental research may be possible because the variables of interest are ethically manipulable, a researcher instead chooses to conduct associational research. For example, in virtually unexplored areas of study, researchers may use associational methodology to identify variates potentially important for subsequent experimental research. Such pilot studies can screen larger numbers of potential variates at substantially less cost than could be accomplished under strictly controlled experimental methods (Cook & Campbell, 1979; Cozby, 1981). Finally, there are occasions when simulation and experimental manipulation of real-world phenomena is simply too costly in terms of time, money, or resources (Cook & Campbell, 1979; Sullivan, 1972).

Reaching Conclusions in Studies of Association

As noted, most research seeks understanding of relationships between outcomes and causes. In experimental research, cause-and-effect arguments can be made by virtue of the assumption that through randomization of participants and exertion of experimental control, all possible causes for the differences observed between group outcomes have been eliminated, except for the experimentally manipulated treatment conditions. In associational research, interpretations must be made more cautiously about the direction of cause and effect.

Whereas the cause-and-effect relationship is *designed* into experimental research, in associational studies cause-and-effect can be determined only from *rational* elimination of possible, plausible rival hypotheses. Thus, under certain conditions, causal inferences may be made from passive-observational (i.e., associational) studies, but due caution must be used. Techniques such as causal modeling, cross-lagged panel analysis, dummy variable regression, and causal analysis of time series designs can facilitate such causal analysis (Cook & Campbell, 1979; Skinner, 1984). However, (Cliff, cited in Skinner, 1984), the null hypothesis problem persists: data do not confirm a causal model, they only fail to disconfirm it. Substantiation of the presumed causal link depends on systematic elimination of alternative explanations.

The most serious problem in associational research is the elimination of plausible alternative explanations. In fact, covariance between two passively-observed variables may be caused by the influence of some third, unknown variable (Cozby, 1981). For example, although there are "known" gender differences for some attitudinal dimensions, researchers are still struggling to determine whether those differences are actually attributable to gender or to the manner in which the respective genders are socialized, i.e., the "third" variable. In experimental studies persons are randomly assigned to treatment groups. In naturalistic settings, persons become grouped by virtue of personal characteristics, individual choices, or arbitrary assignment. Groups formed by any means other than by randomization risk bias; the groups may differ in important ways besides the obvious factors by which the groups were identified, again, by "third" variables.

The significance of a correlation coefficient or the reliability of the difference between means or medians is in part dependent on both sample size and the precision with which the variables involved are measured (Skinner, 1984). Kerlinger (1986) noted that "a frequent source of interpretative weakness...is neglect of measurement problems" and urged designers of associational studies to "pay particular attention to the reliability and validity of the measures of variables" (p. 143). For example, an instrument's measurement properties may be altered if the instrument is administered in a setting which differs markedly from the validational setting or by changes in the base rate of the phenomena being studied. Thus, studies using unreliable measurements and studies with small samples risk yielding "no significant relationship" when in fact a meaningful relationship may exist.

Because associational studies can (economically) involve large numbers of variables, researchers may fall prey to the problem, "too many variables, not enough participants." As Skinner (1984) noted, the probability of concluding there is a reliable difference between groups or a significant level of association between variables increases markedly as the number of comparisons or correlations increases.

Perhaps the most important factor influencing conclusions drawn from associational research is the representativeness of the samples studied. All too often, samples used are volunteer "samples of convenience," and therefore the results from them may not generalize to the groups they are purported to represent. Without clear understanding of the population(s) to which the sample findings generalize, consumers of counseling research may be led astray.

Conclusion

Experimental research is often considered the epitome of research in the helping professions. However, there are many important situations in which experimental research is impossible, unethical, or impractical. Kerlinger (1986) argued that for social-scientific research, associational research may be more important than experimental research in that "most social scientific and educational research problems do not lend themselves to experimentation, although many of them do lend themselves to controlled inquiry of the nonexperimental kind" (p. 359). With many important counseling issues, "investigators must take things as they are and try to disentangle them" (Kerlinger, 1986, p. 349). Associational inquiry may not provide the control possible through experimental research, but with cautious interpretation, associational methods can assist in shedding light on antecedents to client problems, counseling processes, and probable

outcomes of various counseling strategies.

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Clearing the Hurdles Along the Way

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Training Helping Professionals For Research

Gary M. Miller

Individuals involved in various aspects of the helping professions need training in substantive research for a variety of reasons. For example, some counselors may hold becoming a researcher in human services as a career goal, some may need research and/or research-related skills to prepare program evaluation reports or other documents for employment requirements, and counselors who are practitioners should use research as a process of inquiry to obtain answers to questions about clients served. All counseling professionals should be effective and active consumers of research literature in the helping professions. Thus, counselor preparation programs must consider carefully their research preparation practices to meet the diverse needs of helping professionals.

Critical Issues

An issue facing counselor preparation programs is that individuals entering training often do not view themselves as researchers and do not view research as an integral part of their professional roles. Although the importance of scientific inquiry in counseling practice has been noted for some time, most students view themselves primarily as practitioners, and only incidentally as scientists. Therefore, it is the responsibility of counselor educators to assist students in developing self-perceptions as helpers who also are competent researchers.

Other issues facing preparation programs include the typical student perceptions that research is synonymous with statistics and therefore difficult, and that research is taught in isolation from other parts of the curriculum. Unfortunately, some programs even use research courses to "screen out" candidates, thereby increasing students' fear of the material before they even enter their research courses.

Role modeling practices of program faculty is another critical issue. In the process of student acclimation to research, faculty, as role models, set the tone for how research is viewed and valued. When research courses are taught by faculty who are directly involved in professional preparation programs, students can interact with individuals who routinely conduct and use research in their profession. However, when research courses are taught by faculty not directly involved in counselor preparation, the perception is often held that research is "done on that side of campus" and not integral to the counseling profession or preparation for it.

Research Infusion Model

The Research Infusion Model (RIM) enhances counselor trainees' research preparation because research is presented, discussed, and conducted in each course across the student's curriculum. Students in introductory counseling courses can be introduced to their profession's research through a scholarly examination of historically significant research, and through faculty promotion of research trends that influenced the profession. Students also can (re)engage in research familiar to them from their undergraduate programs and perhaps integrate it into professional activities. This "user friendly" approach not only promotes knowledge, but also introduces a basic component of all research: an effective review of relevant literature. RIM introduces students to pertinent sources and information systems likely to be useful in their future activities. Finally, this early effort will introduce students to appropriate professional style manuals, requirements, and procedures necessary for effective completion of papers. Instructors need to emphasize the utility of this first research effort because it will enhance students' learning and foster positive self perceptions as practitioner-researchers.

Near the beginning of their preparation, students should develop questions about their profession and their functioning that they hope to examine prior to graduation. The questions can then be formulated into a research agenda they can continue throughout their studies. These agendas can be adjusted as students progress in their preparation, but they should be able to demonstrate, at the conclusion of their programs, how they

selected and researched some aspect of the profession while developing research competencies.

Students typically take courses in research methodology, statistics, and assessment as part of their preparation. Research infusion in these courses should be focused on the helping profession a student is planning to enter. That is, students need to be able to examine and refine their research agendas for their particular professional goals. For example, students aspiring to be school counselors need to examine how research methodology, statistics, and assessment can be applied in school counseling services and programs. They need to examine journals and research specifically related to school counseling. Even when counselor trainees are enrolled in classes having students from different disciplines, it is essential that they learn direct applications of information, skills, and research to their individual career plans. One feasible approach to facilitating a focus on the helping professions in such classes is the use of "research teams" (i.e., subgroups of students having similar professional goals work together on class work and projects). Instructors can thus provide both generalized and individualized instruction.

Another area in which the RIM is particularly useful is in theory and skill preparation. As counselor trainees learn to apply theories and skills, they also need to learn and understand *how* theories and skills impact helping processes. Without such understanding, there is a danger that they will become "helping technologists" rather than fully functioning helping professionals. Reviews of empirical research studies during theory and skill courses help students understand specific theories and counseling techniques more thoroughly, broaden their knowledge, and promote understanding of research-practice linkages as well as needed areas of future research. Students should be encouraged to relate the research examined to their own research questions and agendas previously developed.

Students in supervised practicum and internship phases of training have yet another opportunity to engage in research prior to graduation. At the outset of such experiences, students should present research questions and perhaps answers to them, and develop research activities specifically applicable to their field placement. For example, they may engage in research projects such as analogue studies of their own counseling processes or conducting follow-up studies appropriate for their respective settings. In addition, field placement settings can provide opportunity for students to conduct counseling process and outcome studies. By the conclusion of their field placement experiences, students should be able to present their research efforts to the faculty and demonstrate their mastery of specific research competencies as practitioner-scientists.

Recommendations and Conclusions

The implementation of the RIM as a way to prepare aspiring helping professionals in research addresses the diverse research needs extant in the counseling profession (Gelso, Raphael, Black, Rardin, & Skalkos, 1983). More importantly, it introduces counselor trainees to research in ways that are most palatable to them. It also allows faculty to be effective role models through class demonstrations and professional activities that use and participate in research activities as appropriate and valuable professional behavior. Program faculty should develop curricula that engage students in research throughout their programs and work toward greater integration of research into professional practices.

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Ethical Considerations in Research in the Helping Professions

S. Allen Wilcoxon

Research by helping professionals is founded on the broad ethical precepts of beneficence, autonomy, justice, privacy, and fidelity. Thus, helpers engaged in scientific inquiry have a primary obligation to their research participants rather than to either personal or institutional agendas. To threaten these primary commitments is to reorder professional obligations in a manner that could have negative repercussions for participants, researchers, and the helping professions.

The following overview of ethical considerations in research is intended to emphasize the dual imperatives of care for participants and commitment to objectivity. The bases for these comments lie primarily in the 1995 *Code of Ethics* of the American Counseling Association (ACA) and the customary practices of the field.

Counseling Research with Human Subjects

In research involving human subjects, inquiry should feature intentional activities consistent with safeguards that emphasize the rights of participants over "methodolotry" (Wilcoxon, 1993, p. 10). Specifically, these safeguards include research protocols that insure protection, sensitivity, and minimal interference in the lives of participants. Researchers should consider potential artifacts of their work that might prompt "injurious psychological, physical, or social effects to their subjects" (ACA, 1995, p. 6). The focus of concerns for subjects should be on both the current/pending research activities *and* the potential for post-inquiry effects. In each case, the tradition of ethical practice emphasizes that the primary researcher is responsible for providing safeguards. Such activities should feature minimal intrusion with participants, even to the extent of limiting common practices in collecting data. For example, a rationale of "It may be helpful in the future" suggests limited forethought about the possible impact of potentially disruptive questions; it simply invades subjects' privacy.

A second area of ethical consideration is informed consent. Heatherington, Friedlander, and Johnson (1989) noted that informed consent must feature the three elements of information, comprehension, and voluntariness. The ACA *Code of Ethics* (1995) instruct counselor-researchers to take great care to insure that participants understand (a) the purpose and procedures to be followed, (b) experimental/untried aspects of the project, (c) possible risks or discomforts, (d) reasonable expectations for benefits or changes, (e) alternative procedures, and (f) limitations on confidentiality. Relatedly, informed consent should always feature opportunities for subjects to secure additional information and to discontinue participation at any point. These precautions presuppose subjects' voluntary participation without penalty for declining or prematurely withdrawing from the project.

A related area of propriety in research concerns the general ethical precept of confidentiality. The broad application of confidentiality is assurance of privacy within the professional relationship. This notion is rightfully extended from thecounselor-client relationship to the researcher-participant relationship. Specifically, confidentiality in research implies assurance of privacy/anonymity for research participants throughout and following empirical inquiry. Similarly, helpers should extend assurances of confidentiality to participating institutions, agencies, or organizations. When threats to assurances of confidentiality exist, participants should be informed. Again, prospective subjects should receive sufficient information to allow thorough consideration of their options *prior* to participation in research. To do otherwise impedes participants' full awareness of their measure of jeopardy.

Beis (1984) suggested fully informed formal consent as a safeguard for both ethical and legal reasons. He suggested that assuring full disclosure of information should be followed by a formal activity (i.e., consent document) to verify consent. The notion that "participation is not consent" suggests a compelling need for a formal document. Thus, researchers should take great care in

determining prospective participants' capacity for understanding and formally granting consent. The ACA *Code of Ethics* (1995) indicates that consent should be provided "from a legally authorized person" (p. 6). This notion is applicable for individuals, institutions, and sponsors associated with the research.

An area of unique ethical duty for researchers in the helping professions is inquiry in which deliberate deception of participants is an essential element of the project. Inherent in such research is the ethical dilemma of client welfare and respect juxtaposed against potential gain via scientific study. On occasion, deception is simply a vital part of meaningful inquiry. In such instances, fully informed formal consent is sacrificed in favor of a potential scientific gain. If, after careful deliberation and review, the researcher determines that deception is essential, such pretenses are to be abandoned *and* "the investigator is required to explain clearly the reasons for this action *as soon as possible*" [*emphasis added*] (ACA, 1995, p. 6). The ethical expectation for reasonable precautions to avoid causing harm is even more compelling in research featuring deception.

Although not directly deceptive in nature, some forms of research feature a no-treatment control group as a method of comparative study for various methods of intervention. Such practices are methodologically sound, yet they pose an ethical dilemma for participants who might be denied services for research purposes. Jurich and Russell (1985) noted that "the use of pure control groups for which all treatment is withheld is unethical; therapy must always have priority over research" (p. 95). They also noted that potential clients agreeing to a no-treatment via control-group placement may reflect resistance to therapy which is supported by the research protocol.

A final ethical concern is commitments to participants and to colleagues. Researchers have an ethical duty to honor their commitments to those supplying data for their inquiries. Similarly, colleagues assisting in research are expected to honor commitments to cooperate in a timely, thorough, and professional manner. This dual obligation to participants and fellow professionals is grounded in the heritage of the scientist-practitioner and collaborative-researcher traditions of helping professions.

Reporting Results from Counseling Research

Research is intended to extend inquiry to increase knowledge for the good of humankind. Therefore, researchers in the helping professions have an obligation to share their findings. Several ethical considerations emerge to guide attempts to comply with this obligation.

To be beneficial, research must be replicable for those wishing to examine new findings or question reported findings. Therefore, researchers are ethically bound to report comprehensively on variables/conditions that might have affected their stated outcomes. Otherwise, attempts at replications and/or extensions might lead to errant conclusions that could adversely affect client care.

In reporting outcomes, helping professionals should report in an unbiased, scientific manner to avoid misinterpretation or unfounded conclusions. Similarly, researchers should report not only findings that feature affirming, favorable results but also those with unfavorable reflections on practices, traditions, services, or programs. Intentionally distorting research findings to preserve an inaccurate perception or pervading claim is unethical and potentially libelous. As with all aspects of professional care, researchers are ethically obligated to protect the confidentiality of participants in reporting the outcomes of their research.

A final area of ethical propriety in reporting research concerns publication of findings. Two primary issues affect author considerations in published research (a) proper contributor recognition and acknowledgment (e.g., joint vs. sequential authorship), and (b) exclusive submissions. Proportionate contributions to the publication are to be reflected in authorship recognition, even if the primary author has a "status" beyond that of secondary authors (e.g., professor/student). Similarly, recognition of research efforts via publication implies exclusive review by a prospective outlet. Thus, expectation exists that prospective publications are reviewed by only one source; subsequent works reflecting similar content should acknowledge the original outlet. In summary, ethical publication of research encompasses a commitment to equity, fairness, and rights of distribution.

A Final Thought

Some unique ethical considerations exist in research of the helping professions. Essentially, all decisions relative to research activities should feature the goal of enhancing service to clients. The previous discussion has been intended to examine both the formal and traditional considerations of research in the helping professions. Subsequent changes will

likely reflect extensions of this heritage to insure quality care and sound inquiry.

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Legal Considerations of Research in the Helping Professions

Stephen Shumate

Although considerable overlap occurs between law and professional ethics, important distinctions exist between these two ways to regulate conduct. Generally, law provides the minimum acceptable standard of professional conduct while ethical codes direct professionals toward more rigorous standards of behavior.

Several important legal considerations apply to helping profession research using human subjects. For example, the United States government has promulgated regulations that require every institution receiving federal support to establish review boards for evaluating research involving human subjects. These regulations also provide a foundation from which the legal conduct of researchers can be measured (Grigsby & Roof, 1993) and describe the requirements for informed consent, privacy, confidentiality, and remedies [see 45 C.F.R. S 46, 34 C.F.R. S97, 34 C.F.R. S98]. Other legal considerations in research concern negligence, fraud, and deceit (Grisso et al., 1991).

Informed Consent

Essential to the recruitment of subjects is their freedom to choose whether to participate. It includes the option to withdraw from participation in the research without penalty. Several additional elements must be present in a signed consent document, including (a) complete description of the procedures employed and potential demands upon subjects, (b) information concerning reasonably foreseeable risks, discomforts, or benefits, (c) information concerning appropriate alternative procedures or courses of treatment, (d) description of the extent to which confidentiality will be maintained and, (e) explanation of whom to contact about subjects' rights and whom to contact in the case of injury. Also, additional, relevant information unique to the study, such as time or financial commitments or extraordinary risks must be communicated to subjects (45 C.F.R. S 46, 34 C.F.R. S 97, 34 C.F.R. S 98). Research involving children, minors, or the severely disabled requires special attention. Children do not have legal capacity to enter a binding agreement. Therefore, consent must be from parents or legal guardians. The law protects the severely disabled similarly. Generally, for minors under age 18, parental or guardian consent is required but there are exceptions. For example, research with emancipated minors as subjects, to obtain information concerning drug and alcohol abuse, or about certain sensitive health issues (e.g., sexual disease) may be exempt from parental consent requirements (Nelson & Hendrick, 1983).

Privacy and Confidentiality

An individual's right to privacy takes precedence over the rights of researchers to generate knowledge. Generally, it extends to all information concerning a person's mental and physical status, personal and social circumstances, or other aspects of one's personal life which is not already in the public domain [see Privacy Act of 1974, 5 U.S.C. S522(a)]. However, despite this broad legal protection, judicially compelled disclosure that identifies subjects has occurred (Teitelbaum, 1983). A tension exists between subjects and researchers from whom information has been collected, and legitimately interested third parties such as police, public health officials, and congressional committees. However, courts and congressional committees have broad and powerful subpoena powers, and some compromises have been achieved [see the Public Health Services Act (42 U.S.C. S242(a)) and the Drug Abuse Office and Treatment Act (21 U.S.C. 1175(a); also 42 U.S.C. S4582(a) for alcohol-abuse research]. These statutes provide extended statutory protection for subject information. Preventive steps for avoiding legally compelled disclosures of subjects' information are possible if researchers use foresight. The most effective means is to destroy identifying information immediately when its necessity for research purposes ends. However, note that any destruction of information *after* a subpoena has been issued can result in a contempt citation. An even better strategy is to use procedures that eliminate the need to obtain

identifying information, thus minimizing potential for judicially compelled disclosure of confidential information (Teitelbaum, 1983).

Negligence

The tort of negligence refers to a legal duty to refrain from acts that would bring harm to others. "Actionable negligence is the failure of one owing a duty to another to do what a reasonable and prudent person would ordinarily have done under the circumstances, or doing what such a person would not have done under the same or similar circumstances, which proximately causes injury or damage to the other" (Union P. R. Co., v McDonald, 152 US 262). A special or fiduciary relationship exists between researcher and subject, which is a legal duty to use due care in the course of conducting research. The standard of care that applies is that of similarly situated researchers (57a Am Jur 2d SS 6-10, SS 190-192). Absent physical injury, courts generally have held that there is no allowable recovery for negligent infliction of emotional distress. However, this traditional rule of law has been eroded significantly in recent decades. When the distress caused to another can be foreseen, the legal issue turns on the extent of the liability. In the case of distress caused to human subjects in research, liability is affected by the constitution of the person harmed. For example, a researcher might foresee some distress caused by "high social pressure" but expect that no damage could be recovered in court. However, if a particularly sensitive individual participates, and as a result suffers great emotional distress culminating in measurable damages (e.g. medical fees), then the researcher *may* be liable on a theory of negligence.

Prudent researchers attempt to anticipate potentially harmful effects of an inquiry or experiment on human subjects because potential risks can be described in subject recruitment *and* written into the informed consent document. Screening interviews also may be used to exclude unusually sensitive subjects from research. Contingency plans should be developed for subjects who may display adverse reactions during research. Finally, debriefing subjects, particularly when information has been withheld or distorted as part of the research, can prevent adverse post-treatment effects. Consultation with skilled, experienced researchers can help other researchers anticipate potential problems with human subjects (Blanck, et al., 1992).

Fraud and Deceit

Fraud and deceit have similar essential elements but differ in terms of the evidence required for recovery and/or remedies allowed. The essential elements offraud and deceit include that a representation was made as a statement of fact when it was known to be untrue by the party making it. The representation was made with the intent to deceive and for purposes of inducing the other party to act upon it; and the other party in fact acted upon it, was injured, and suffered damages. The action also can be based on concealment, false pretenses, or other fraudulent devices, strategies, or tricks (37 Am Jur 2d S 12). Researchers generally violate fraud and deceit law in two ways. First, when research is designed to study the effects of concealed, false, or misrepresented information, the risk of harm to human subjects increases. Second, when researchers deliberately conceal, alter, or otherwise misrepresent their data, they are potentially liable to the funding source or others who may rely on these results to their injury.

Conclusion

A dilemma frequently confronts counseling researchers in their research with human subjects. As helping professionals, their mission is to facilitate insight, teach skills, and otherwise empower clients to relieve suffering. As researchers, they are devoted to furthering knowledge. Thus, sometimes the immediate needs of human subjects are sacrificed, ignored, or minimized for the sake of data collection (Katz, 1993). However, conscientious planning, proper informed consent procedures, adequate safeguards, and healthy respect for individual autonomy, self-determination, and privacy enhance both the quality of the research results and the reputation of the profession.

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Measurements for Research in the Helping Professions

William D. Schafer

Assessment, broadly defined as methods of gathering information about people, typically includes measurement. However, assessment does not always include measurement. For example, techniques such as portfolio assessment (Arter, Spandel, & Cullham, 1995) may not involve measurement *per se*. Nonetheless, quantitative data are usually obtained for research through *measurement*, which may be defined as a process by which symbols are allocated to objects. In the social sciences, typically the symbols are numbers and the objects are characteristics of people. However, the definition allows broader applications, such as using letter codes or even words to describe variables such as race, gender, or type of therapeutic regimen.

Whenever measurement is used, symbols should accurately represent differences among objects. Therefore, effective comprehension of a measurement, and differences resulting from its application, necessitates understanding of both the construct underlying the characteristic (*what* is being measured) and the operational definition of symbol assignment (*how* the construct is being measured).

Constructs: The What

Constructs are defined within a broad context of theory and in relation to other constructs. For example, constructs such as "adjustment" or "career indecision" are best understood as parts of personality or career development theory. Understanding constructs is important because often it is only possible to comprehend differences in research results by comparing theoretical definitions for the constructs measured.

Traditionally, human constructs measured are divided into three domains: cognitive, affective, and psychomotor. The cognitive domain includes intellectual abilities, involving knowing and using knowledge (thinking); achievement and aptitude measurement are examples. The psychomotor domain encompasses physical abilities, including behavioral skills. Measurement in this domain often includes simulation of performance in settings to which the results may be generalized, such as measurements of typing or driving skills. Personality characteristics in general, including traits such as feelings, beliefs, or attitudes, fall in the affective domain. Measurement in the affective domain is the type often of primary interest and use to helping professionals. However, measurement in the affective domain is often the most difficult because of the complexity of constructs measured.

Operational Definitions: The How

An operational definition specifies exactly how data are obtained. A primary criterion for an effective operational definition is that it be reproducible; others should be able to have the same inferential strength from measurement results.

After the construct and operational definitions for a measurement have been described effectively, it may be evaluated according to psychometric criteria(AERA/APA/NCME, 1985). The primary psychometric criteria are reliability, validity, and practicability.

Reliability is defined as the ratio of the variance of true scores (those the examinees theoretically should receive) to the variance of scores actually obtained. Reliability is not actually a property of a measurement, but rather is a characteristic of the measurement only for its use with a specific population (Thompson, 1995).

Reliability is estimated in several ways. However, all methods confound reliability with various other characteristics, such as homogeneity (whether items on a test measure the same trait), equivalence (whether different forms of a measure or different subsets of items have equivalent accuracy), and stability (whether individuals being measured possess the same true scores over time).

Two interesting developments related to reliability are generalizability theory and item response theory. Using generalizability theory (Webb, Rowley, & Shavelson, 1988), it is possible to assess different sources of unreliability in a given measurement context and predict their impacts upon

redesigned instruments. Item response theory (McKinley, 1989) allows relation of the probability of each possible response on an item to a person's location on the trait being measured.

Standard error of measurement is closely related to reliability. It is the standard deviation of errors of measurement (differences between the scores each person ideally should and actually does receive). Unlike reliability, the standard error of measurement is assumed to be a property of the measurement. It also is assumed constant across true scores, but often actually is larger in the middle of the measurement's score range (Harvill, 1991). A reliability coefficient must be calculated first because the standard error of measurement is the standard deviation of the observed scores times the square root of one minus the reliability coefficient.

Validity is the extent to which measurement results allow accurate inferences about the construct being measured. Reliability is a prerequisite for validity because measurements with large errors cannot yield substantial inferences about constructs.

Historically, validity has been classified into three types: content, criterion-related, and construct. However, Messick (1989) argued that the only meaningful type of validity is construct validity. Thus, all the various types may be considered as referring to sources of evidence about construct validity.

Content validity evidence evolves from the degree of match between the actual content of the measurement and the construct being measured. Usually, it is established through evaluation by experts, who sometimes use a table of specifications. A two-dimensional table of specifications has one dimension containing the material the measurement covers (e.g., content areas in an achievement test) and another containing a taxonomy of activities characterizing the appropriate domain (e.g., recalling, analyzing, and evaluating are examples from a cognitive domain taxonomy).

Criterion-related evidence is established through correlation of results from the targeted measurement with results from other measures. Concurrent validity evidence exists when two measures of the same trait are correlated; it often is used to evaluate whether one measure can be used as a substitute for another. Predictive validity evidence exists when the results of one measure can be used to predictresults on another, later measure (typically a different trait). For example, academic aptitude measures may be evaluated in regard to how well they predict future grade point averages.

Validity evidence also may be generated by comparing patterns of correlations between a measure's results and results from other understandings of the construct. If a measure correlates with other measures in ways it should, it has convergent evidence. Conversely, if a measure does not correlate with measures to which it should be unrelated, it has discriminant evidence.

Validity also is often studied using factor analysis. Confirmatory analyses and extensions of them using structural equation models are particularly effective (Baldwin, 1989).

Practicability means a measure should be useful in a particular context. For example, a measure should be appropriately priced, reasonably easy to administer and score, and have an appropriate administration time period. It also should provide useful information and be adaptable to whatever demands are made upon it, such as use with persons with disabilities.

Recommendations

Researchers are well-advised to consider existing measurements before undertaking the development of new ones, and several primary sources exist to find them (Kapes, 1995; Plake & Conoley, 1995). However, if a new measure must be developed, adherence to accepted psychometric standards and techniques is essential. Many good texts are available to provide useful suggestions about instrument construction, evaluation, and improvement.

Summary

Whether constructing or evaluating a measure, two definitions should be explicit: that of the construct being measured and the operational definition of measurement. A good measurement also is relatively free of error, allows strong inferences about what is measured, and is practical. Good measures are crucial because the conclusions researchers reach are only as good as the data used to reach them.

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Computer Technology and Research in the Helping Professions

James P. Sampson, Jr.

Computer technology has long been an important research tool in the helping professions. Beginning with the capability to do simple repetitive calculations, computers now complete complex statistical analyses that are virtually impossible to calculate by hand. It is now hard to imagine completing a research project without using a computer and word-processing software. However, in spite of the widespread use of computers, the potential of computers to facilitate research is only being partially realized. Cost is certainly a factor in explaining under-utilization, but researcher awareness of computer capabilities is also a significant limitation. Therefore, this Digest was developed to promote awareness of the potential use and abuse of computer technology as a research tool in the helping professions.

Potential Uses of Computer Technology as a Research Tool

Research quality is directly related to the effectiveness of research planning. Computer technology can support and enhance research planning in regard to literature reviews, reference management, and computer-assisted research collaboration (Sampson, 1991).

Computer-based CD-ROM systems and Internet access facilitate literature reviews by allowing multiple key word searches of large bibliographic databases (e.g., ERIC, PsycLIT, and *Dissertation Abstracts International*) and subsequent electronic file transfer of citations, abstracts, or other information. Expert assistance for conducting a literature search is becoming available via hotlines, such as the ERIC/CASS toll-free number (800-414-9769) and electronic-mail, such as ERIC/CASS on the Internet (ericcas2@dewey.uncg.edu) or AskERIC (askeric@ericir.syr.edu).

As researchers engage in more programmatic research, reference management becomes a bigger problem. "Having a database management system working for you will enable the cataloging of what has been read as well as the accessing of specific material by author, title, subject, journal, date, location, keyword(s), etc." (Dickel, 1988, p. 8-9). Customized reference management software is available, or a generic data base management system can be adapted to facilitate reference management.

Computer-assisted, collaborative research projects increasingly are being conducted by multiple authors in various geographic locations. Computer technology allows researchers in disparate locations to engage in research planning by sharing ideas, via electronic mail on a one-to-one basis, or computer conferencing on a group basis, and/or by exchanging files of text and numerical data via file transfer protocols. Electronic bulletin boards, such as the International Counselor Network, and list servers, such as the Counselor and Therapist Support Network (CATS²)from ERIC/CASS, also facilitate exchange of ideas, which is an important and necessary first step in collaborative research planning.

Presentation of Treatment Conditions

It is often difficult to document accurately the specific nature of treatmentconditions used in counseling research. Computer applications may improve the standardization of treatment conditions by making them more consistent in content and structure (Katz, 1990). Examples of relatively standardized computer presentations of treatment conditions include use of computer-assisted career guidance systems in career counseling research (Katz, 1990) and simulations of client behavior in counseling interviews used in counseling process research (Lichtenberg, Hummel, & Shaffer, 1984).

Data Collection

Computer applications as treatment conditions can be used to collect data unobtrusively. This approach allows data collection that would otherwise be too difficult or expensive to obtain. For example, a computer-assisted career guidance system can

collect data unobtrusively on the characteristics and decision-making process of users (Katz, 1990). Similarly, a computer-assisted instruction program can be used to collect data unobtrusively to validate a specific approach to alcohol education.

Data Analyses

Substantial progress has been made in the development of user-friendly statistical analysis software. For example, readily available electronic spread sheets can assist in the creation of data files *and* the calculation of basic statistical analyses. Alternatively, the files thus created can be easily used as input for other statistical software packages. Readily available versions of statistical software are capable of completing all but the most advanced analyses. More sophisticated or less common analyses can be completed via a local area network or by transferring the data file to a mainframe computer.

Dissemination of Results

As traditional paper-oriented publishing and mailing costs continue to increase, research reports and journal articles will increasingly be available in electronic forms and/or over electronic networks such as the Internet. This dissemination approach will reduce publishing costs; facilitate directly and correctly transferred quotes, tables, figures, and references among documents; and allow rapid keyword searches of reports and journals for preselected topics and authors.

Abuse of Computer Technology as a Research Tool

Computer technology as a research tool also can be abused (Sampson, 1991). In most studies, the procedures involved make it difficult to conceal that subjects are involved in a research project. However, given the options for computer-assisted presentation of treatment conditions and unobtrusive measurement as described previously, unauthorized data collection is a potentially serious problem. Also, computer capabilities to maintain large amounts of data for long periods of time, coupled with easy electronic data access, could result in violations of confidentiality of computer-maintained research records. Informed consent among research participants and careful efforts by researchers to maintain data security are important safeguards in avoiding these ethical problems (American Counseling Association, 1995).

Recommendations

The potential contribution of computer technology to research in human services is substantial, but the risks and costs need to be considered carefully. Achieving the potential benefits of computer technology while simultaneously avoiding legal and ethical problems requires that counselors and other human service professionals be trained in appropriate uses of computer technology for research purposes. Preservice and inservice research training in this regard should include extensive knowledge and skill acquisition in the use of computer technology. Also, continued funding support for secure maintenance of bibliographic data bases and telecommunication networks needs to be provided. Finally, funding support is needed to develop decision support systems to assist practitioners and researchers in research design planning (Sampson, 1991).

Conclusion

Computer technology is a powerful tool to improve the planning, execution, and dissemination of research when used effectively and appropriately. Although the costs associated with computer hardware and software remain problematic for many human-service professionals, the time and effort required to learn and remain current in effective use of the technology is often a more formidable barrier. However, as potential research benefits increase, the value of professionals investing both money and time in computer technology increases as well.

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Writing for Publication of Research in the Helping Professions

Martin H. Ritchie

Publishing research in the helping professions can be an exciting and rewarding experience resulting in professional recognition and advancement. It also can be a frustrating and discouraging experience for those unfamiliar with publishing processes. The purpose of this digest is to provide insights and tips on how to get published in professional journals. The assumption being made here is that the research has been completed and a summary of the study and its results is ready to be submitted for publication.

Importance of Publishing Research

Professional journals are the repositories of knowledge in scientific disciplines, including the helping professions (Ellis, 1991). With the exception of best selling books, journal articles reach more professionals than any other media. In the helping professions, flagship journals of national associations such as the American Counseling Association have from 50,000 to 200,000 subscribers. Additional thousands who don't hold subscriptions to professional journals, access them through libraries and/or computer databases. Thus, professional publication is important because the knowledge and information provided are used by many professionals.

Choosing a Journal

The first step in publishing is deciding where to send the manuscript because there are hundreds of journals applicable to the helping professions. Authors must decide which journal is the most appropriate forum for the research and/or most likely to publish it. The selection process is facilitated by perusing potentially appropriate journals. The types of research each journal publishes (e.g., quantitative, qualitative, or literature reviews) should be "matched" with the type of research to be submitted. Time spent reviewing journal preferences, formats, and priorities literally can save months in publication processes.

Submitting the Manuscript

Most journals have guidelines and instructions for preparing manuscripts, which usually appear in at least one issue of each volume year. After an appropriate journal has been found, the manuscript should be prepared *exactly* according to guidelines which address topics such as number of pages, typing format, abstract format, forms of tables, and referencing style. Not following guidelines exactly increases the likelihood that the manuscript will be returned without review. Checking and rechecking for spelling and grammatical errors and proofreading before submission are essential, as is correct referencing (including a one-to-one correspondence between text and reference list entries). Authors have full responsibility for reference accuracy (White, 1987).

If the journal publishes articles under specific subdivisions (e.g., *Research* or *In The Field*), the manuscript should be written consistent with the format and style criteria for the appropriate subdivision. Questions about the appropriateness of the manuscript in general for the journal or about its guidelines should be directed to thejournal editor. However, contacting an editor in an attempt to secure a commitment for publication before submitting a manuscript generally is not fruitful or helpful.

The cover letter accompanying a manuscript submitted for publication should be brief; indicate for which journal subdivision it is intended (if appropriate), and provide address and telephone number(s) to which correspondence about the manuscript should be directed. Nothing else needs to be written. For example, extolling the virtues of the research and/or its importance for publication falls upon deaf ears. Authors should take note that it is unethical to submit the same manuscript, or one essentially similar in content, to more than one journal at a time.

Review and Publication Processes

Publication procedures in non-refereed and pay-to-publish journals and books are not covered in this discussion because typically they are neither as scholarly nor as widely read as refereed professional journals. Among refereed (i.e., has an anonymous manuscript review process) journals in the helping professions, actual review and publication procedures vary. However, most follow the process outlined below.

Publishing in a national or international refereed journal often is a lengthy process. Typically, it takes from one to two years from the time a manuscript is submitted until it appears in print. If several revisions are necessary, it may take even longer.

When the manuscript is first received, the journal editor determines whether the topic is appropriate for the journal, the requisite materials (e.g., number of copies) have been submitted, and the manuscript style is appropriate (e.g., APA, 1994). If the manuscript is deemed inappropriate, it is returned without review. If it has at least some potential for publication in the journal, the editor sends notification of receipt of the manuscript to the senior author.

Next, the editor selects between two and six of the journal's editorial board members (i.e., reviewers) to evaluate the manuscript. Authors' names and institutional affiliations are removed before the manuscript is sent to reviewers to ensure a "blind" review. The reviewers then read and critique the manuscript and return it to the editor with an evaluation form and written comments. Typically, this review takes between one and three months. Next, the editor reads the manuscript and reviewers' evaluations and comments and makes a decision about its disposition.

Editors can accept a manuscript as is, invite submission of a revised and rewritten manuscript, or reject the manuscript. Professional journals typically receive 8 to 10 times more manuscripts than can be published. Rejection rates of 70% to 90% for manuscripts sent to refereed journals are not uncommon. Some manuscripts are rejected because they are not written in accord with the journal's mission or format requirements. Others are rejected because manuscripts on the same topic have already been accepted for publication. When a manuscript has been rewritten and resubmitted, it is sent for another "blind" review, and sometimes rejection is recommended at that point.

After a manuscript has been accepted, it may take six months to a year before it appears in print. Publishing firms require several months to prepare a journal for publication and perform final proofreading. If the publisher encounters even minor problems with a manuscript, such as a reference having a different date in the text than in the reference list, the publication of the journal is delayed until the author(s) can be contacted to correct the problem.

Revising the Manuscript

If the manuscript is returned with a letter inviting revision, rewriting, and resubmission, there is a fair likelihood that it will be published in the journal *if* it is revised according to the suggestions given. Typically, the editor includes evaluations and comments from some or all of the reviewers. Sometimes these are highly critical, but they are meant to be helpful, not discouraging. The editor should be contacted if there are questions about suggestions provided, but this is not a time for debate or argument. The manuscript will be published only if it has been revised in accord with the criteria stipulated. Revisions should be made promptly because journal editors change frequently and subsequent editors may not be interested in the manuscript. The cover letter for a resubmitted manuscript should detail the changes made.

Rejected Manuscript

If the manuscript is rejected, don't feel alone; most manuscripts are rejected at first submission. Having a manuscript rejected is not pleasant, but it is not a reason to denigrate the editor, reviewers, or review process. Rather, the editor's and reviewers' comments should be considered constructive criticism to assist in rewriting the manuscript. Also, there are many other journals which may accept a revised manuscript for publication. If appropriate, select another journal and submit the revised manuscript. However, if the research is too flawed to be published, *use* the suggestions in conducting new research. Engaging in the process of submitting research results for review by professional peers and then making revisions according to reviewers' suggestions improves research methodology and writing while ensuring that what gets published is of the highest quality. Finally, consider volunteering to serve on an editorial review board as another way to improve writing and research skills.

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Searching ERIC for Counseling Resources

Lisa Schenk and Cheryl C. Holcomb

ERIC (Educational Resources Information Center), the largest and most searched on-line database in the world, provides researchers, students, and professionals in education and related fields with readily accessible resource information (Stonehill & Brandhorst, 1992). Begun in the early 1960s and federally funded (Brandhorst, 1992), the ERIC database contains over 800,000 bibliographic records of documents (e.g., research reports, conference papers, books, classroom guides) and journal articles (Smarte, 1994). These materials can be accessed at over 3,000 locations throughout the world. In addition, complete microfiche collections of ERIC documents are housed at approximately 1000 locations (Stonehill, 1992). Also, ERIC searches using CD-Rom technology, which became available in 1986, have been extended to include electronic networks (e.g., Internet) and commercial on-line services (Smarte, 1994). There are 16 discipline-specific Clearinghouses in the ERIC system, each of which provides information on current research, programs, and practices for pertinent topics (Smarte, 1993b). For example, the ERIC Counseling and Student Services Clearinghouse (ERIC/CASS) includes materials focusing on research, theory, training, and practice in counseling and related professions (ERIC/CASS, 1994).

Counseling Resources in ERIC

It is not possible to provide descriptions of all the types of resources listed in ERIC. However, a few examples illustrate possibilities which extend beyond typical literature searches. School counselors can obtain counseling/guidance program descriptions, lesson plans, and other practice oriented materials. Community health education, mental health, and social service professionals can find publications and other media that are helpful in working with specific clientele. Included are books or films which explain problems associated with a specific disability and pamphlets with translated information that can be distributed to clients of limited English proficiency. Professionals working in agencies, corporations, colleges, and universities as counselor educators, supervisors, or practitioners can retrieve program descriptions, annotated bibliographies, videos, or other media resources for information on a variety of topics such as bibliotherapy, families, employment supervision, or counselor training. The possibilities are virtually limitless, and effective search strategies make discovering them simple and convenient.

Availability and Cost of Searching ERIC Databases

Manually searching through printed ERIC indexes was common practice for decades and is still an option. However, far more expeditious electronic searches can now be run from most university, public, or professional libraries, or information centers which subscribe to ERIC on compact disc, or through on-line services from which ERIC can be accessed. Such searches are often free or available at nominal cost. Moreover, subscription to a commercial on-line vendor allows access to ERIC at work or home via personal computer and modem. Whatever the access modality, strategies for an ERIC search are the same.

Searching a topic yields annotated bibliographic listings of journal articles, other documents, and media on the topic. The desired journal articles then can be located at libraries, or copies can be ordered from University Microforms International (UMI, 800-521-0600, Ext. 2786). Microfiche ERIC documents can be accessed at many academic libraries, or copies can be ordered from the ERIC Document Reproduction Service (EDRS, 800-443-3742).

Searches on a specific topic also can be obtained for a nominal fee from ERIC/CASS (ERIC/CASS Clearinghouse, 1994). The results (citation lists with abstracts) of these searches are returned by electronic transmission (via the Internet or fax) or by mail in a floppy disk or hard copy form as requested.

Strategies for Searching ERIC

There may be thousands of relevant references

for a topic, but most users are interested in only a relatively small number of them. Limiting the search *vis-a-vis* learning search proficiency (e.g., identifying appropriate parameters or key word descriptors), helps locate the best quality information and resources without cumbersome trial-and-error effort (Piette & Smith, 1989). Time spent preparing a list of potential terms (i.e., key words) to be used in an ERIC search is time well-invested because it reduces the actual search process (Smarte, 1993b).

The recommended first step is to describe the topic or question in simple terms. Next, two or three major concepts from that description are selected and entered into the Thesaurus of ERIC Descriptors in order to locate available, pertinent descriptors for each concept (Smarte, 1994); many on-line or CD-ROM versions of the ERIC database feature a built-in Thesaurus of ERIC Descriptors. The user's guide appropriate to the software being used or a helpful reference librarian can assist with this selection process. Many libraries also offer the Thesaurus in book form, which contains listings in alphabetical order; its use is similar to that of any thesaurus. If a Thesaurus of ERIC Descriptors is not available, ERIC/CASS user services specialists may be contacted directly for assistance.

Broadening or narrowing a search is achieved by placing the operators "AND" or "OR" between descriptors. AND narrows the search because the computer finds only those references which contain all terms listed. Conversely, OR broadens the search because the computer locates any reference which contains any of the terms listed (Smarte, 1993a).

ERIC entries are classified by "fields," such as title and author indicators. Some fields are set for targeted searches such as title, author, or journal citation (for articles). Other frequently useful fields include AN (accession number)—locates documents on ERIC microfiche or to order EDRS reproductions, PY (publication year)—limits a search to references published in specific years, LA (language)—locates references in a specific language, DE (descriptors)—limits a search to topic areas defined by the Thesaurus of ERIC Descriptors, DT (document type)—locates specific types of references such as research articles or lesson modules for group training activities, and ID (identifiers)—locates by name very specifically defined topics such as a country, assessment instrument, or counseling theory. The alphabetized ERIC Identifier Authority List is available at most libraries or directly from ERIC/CASS.

Conclusion

The user-friendly ERIC database is designed to locate pertinent information and resources. New listings are continually being added and new, easier access venues are continually being developed and implemented (Stonehill & Brandhorst, 1992). Effective use of search strategies in the ERIC databases greatly facilitate location of resources for better research, enhanced professional practice, and general professional development. Thus, ERIC has been and remains a primary professional resource.

Consult a reference librarian, call ERIC/CASS (800-414-9769), or Access ERIC (800-538-3742) for basic guidelines for getting started if you need assistance. Many educational institutions also offer tutorials or training sessions for novice searchers (Strohmenger & Lanham, 1991).

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Conclusion

The Blending of Research and Practice in the Counseling Profession

Nicholas A. Vacc and Larry C. Loesch

During the last decade, there has been a distinct increase in interest among counseling professionals in research activities which, in our opinion, has led to an advancement of counseling practice. There is little disagreement about the importance of research for and by counselors, but disagreement does exist concerning the place and role of research in practice. Yet, it is quite clear from the papers in the section "The Problem of the Problem" that the divergence of opinion regarding research and practice has narrowed considerably since the early 1980s (Vacc & Loesch, 1983) resulting in several areas of agreement. First, all the papers in this section affirm the importance of training in research. Second, a broader definition of research is viewed as valuable. Third, the need to integrate research and practice is strongly endorsed.

A remaining issue in need of attention in the ongoing professional debates and unresolved issues concerning the place of research in counseling is the development of ways in which research and training can be strengthened further. We believe that to move forward, it is important to define counseling research, and training for it, in a way that fits counselors' professional preparation. Building on this premise, we suggest a "melting" of research and training; the principles of scientific inquiry and counseling service delivery functions are a conjoint activity. We believe that for a counselor's potential to be realized fully, effectively, professionally, and usefully to clients in particular and society in general, research needs to be integrated more with practice.

The point of view that research, as a specialty activity, can be grafted artificially onto the profession to be studied and applied independent of practice must be changed. Research needs to be a component of counseling practice and therefore of counselor preparation. The spirit of inquiry must pervade the counseling practitioner's outlook. Encouraging counselor trainees and counselors to view themselves as functioning sometimes as researchers and functioning sometimes as practitioners does *not* promote a self-regulating profession. Our underlying conviction is that we belong to an independent, self-regulating profession which must rely on itself for change and improvement in services. Counselors and counselor trainees should view themselves as both practitioners *and* researchers regardless of their goals or specific activities. The manifestation of the spirit of inquiry must become the norm rather than the exception in counseling.

This conceptual model of linking research and practice, in which we perceive ourselves as both practitioners and researchers, can be viewed as problem-solving. The idea that research represents problem-solving behavior is not new or unique, but emphasis on the similarity of the problem-solving process in practitioner-oriented and research-oriented activities is a new twist. Many counselor preparation programs encourage an empirical approach to counseling, but instruction about the importance of research is typically concentrated only in research-oriented courses. We advocate wider dispersion of emphasis on research principles and methods throughout the curriculum. This model has been presented previously by Haring-Hidore and Vacc (1988) and Vacc and Loesch (1983, 1994), who advocated the incorporation of research and practice as a concurrent activity throughout training.

Although the dimensions of a concurrent approach to research and practice in counseling are similar to the science and practice dimensions of other models (e.g., Rainy, 1950), the crucial distinction is the integration of research and practice principles within the entire structure of counselor preparation and practice. We continue to emphasize that becoming a self-regulating and independent profession can be achieved only by the integrated activity of research and practice coming together in all aspects of professional counselor functioning.

We hasten to add that we are not suggesting the adoption of preparation or practice procedures used in related professions such as clinical or counseling psychology. Rather, we are suggesting that the blending of research and practice makes considerable sense for the counseling profession. As Loesch (1984)

indicated, the realities of what needs to be taught in counselor education often conflicts with what should be taught. Thus, we are advocating modification of our preparation activities to achieve harmony between counselors' preparation and the activities required of counselors in professional practice. Basic to this point is the need to view research from a much broader perspective than has been true in the past. A habitually inquiring, critical attitude among counselors that equates inquiry as a part of practice is needed.

Research as a conjoint process in counseling serves to help counselors formulate problems, identify issues and evaluate the results of their own work (Haring-Hidore & Vacc, 1988). Therefore, preparation in research is equally as important as existing emphasis on practitioner skills and is inherently a part of the process of teaching practice. Such preparation can and will contribute to the effectiveness of the counseling profession and enhance its future. Further, the conjoint research and practice paradigm is appropriate for entry- and doctoral-level preparation; all counselors should embrace the conjoint research and practice model of professional functioning. Thus, the research-practice model needs to be enmeshed in academic courses, field experiences, faculty activities, and the professional practice of counseling.

An appropriate quote to close this digest is a statement that was made by a distinguished past leader in our profession, Robert O. Stripling. As Bob once said, "Guidance and counseling, as formal services, are children of the twentieth century. These services did not stem from the discovery of a deep need in human development. Rather, they were created to meet the manpower demands of the industrial revolution and the urbanization of our society. In this respect, counseling and guidance, like all other professions, has grown out of societal needs. While society has identified needs to be met by different professional groups, the responsibility for determining the quality of professional services rests with the leaders within each profession. Thus, as leaders in the counseling, guidance, and personnel profession, we must be diligent in our efforts to improve the quality of both preparation and services" (Stripling, 1983, p. 206).

The time to improve the quality of both preparation and services is now. A means for achieving this goal is changing the place of research in counseling.

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Vacc, N. A. & Loesch, L. C. (1983). Research as an instrument for professional change. In G. R. Walz & L. Benjamin (Eds.), *Shaping counselor education programs in the next five years: An experimental prototype for the counselor of tomorrow (pp. 25-37)*. Greensboro, NC: ERIC/CASS. Eric Document Reproduction Service No. 237867.

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ERIC Searches

ERIC Resources on Research in Counseling and Therapy

Journal Articles

AN: EJ511318
AU: Spengler,-Paul-M.; And-Others
TI: A Scientist-Practitioner Model of Psychological Assessment: Implications for Training, Practice and Research.
PY: 1995
JN: Counseling Psychologist; v23 n3 p506-34 Jul 1995
AB: Proposes a prototypical model for psychological assessment that reformulates a model of the counselor-as-scientist. Integrates the model's theory and research on human inference, judgment, and decision making; research on threats to accurate clinical prediction; and findings about counselor characteristics associated with effective judgment processes. Explores other issues. (RJM)

AN: EJ500941
AU: O'Brien,-Karen-M.
TI: Enhancing Research Training for Counseling Students: Interuniversity Collaborative Research Teams.
PY: 1995
JN: Counselor Education and Supervision; v34 n3 p187-98 Mar 1995
AB: Citing the need for more research and research training in counselor training programs, this article presents the development of an interuniversity research team that addressed factors related to research productivity, as well as a preliminary evaluation of this innovative method of enhanced research training. (JPS)

AN: EJ495973
AU: Illovsky,-Michael-E.
TI: Defining Samples in Multicultural Psychological Research.
PY: 1994
JN: Journal of Multicultural Counseling and Development; v22 n4 p253-56 Oct 1994
AB: Reviews domestic "ethnic" psychological literature. Draws attention to recurring problems that impede progress in research. Claims that many problems arise from the use of labels that lack meaningful definition and validity. Offers guidelines in conducting research in which ethnicity is a variable. (RJM/Author)

AN: EJ495856
AU: Santisteban,-Daniel-A.; Szapocznik,-Jose
TI: Bridging Theory, Research and Practice to More Successfully Engage Substance Abusing Youth and Their Families into Therapy.
PY: 1994
JN: Journal of Child & Adolescent Substance Abuse; v3 n2 p9-24 1994
AB: Bridges gap between systems theory, clinical research and clinical practice to address patterns that prevent families with substance-abusing youth from entering treatment. Reviews developments in family systems thinking that provide foundation for working with hard-to-reach families, discusses specific family interactional patterns that present obstacles to engagement, and recommends practical strategies for overcoming these obstacles. (Author/NB)

AN: EJ490630
AU: Fong,-Margaret-L.; Malone, Christine M.
TI: Defeating Ourselves: Common Errors in Counseling Research.
PY: 1994
JN: Counselor Education and Supervision; v33 n4 p356-62 Jun 1994
AB: Asserts that much of research currently conducted in counselor education and supervision is unreliable and invalid. Presents tabulation of research designs and errors in manuscripts submitted to "Counselor Education and Supervision." Notes that over 80% of submitted studies were descriptive designs and nearly one-half had errors that invalidated results. (Author/NB)

AN: EJ475496
AU: Hoshmand,-Lisa-Tsoi
TI: Supervision of Predoctoral Graduate Research: A Practice-Oriented Approach.
PY: 1994
JN: Counseling Psychologist; v22 n1 p147-61 Jan 1994
AB: Describes practice-oriented approach to research supervision emphasizing application of clinical thinking and practice-oriented methods to inquiry and involving learning by doing. Reports research interests, orientation, and learning response of practicum students. Concludes that research practicum of this nature can engage interest of practice-oriented counseling students and prepare them for contributing role in research relevant to practice. (Author/NB)

AN: EJ490560
AU: Phillips,-Julia-C.; Russell,-Richard-K.
TI: Research Self-Efficacy, the Research Training Environment, and Research Productivity among Graduate Students in Counseling Psychology.
PY: 1994
JN: Counseling Psychologist; v22 n4 p628-41 Oct 1994
AB: Examined relationship between research self-efficacy, research training environment, and research productivity among 125 graduate students in counseling psychology. Subjects completed measure of self-efficacy in research, Research Training Environment Scale, and demographic questionnaire that included measure of research productivity. Results revealed positive relationship between research self-efficacy and research training environment, and between self-efficacy and productivity. (Author/NB)

AN: EJ486089
AU: Powell, M. Paige; Vacha-Haase, Tammi
TI: Issues Related to Research with Children: What Counseling Psychologists Need to Know.
PY: 1994
JN: Counseling Psychologist; v22 n3 p444-53 Jul 1994
AB: Notes that counseling psychology has traditionally neglected research and practice with children. Focuses on ethical and practical issues in conducting research with child participants. Highlights areas of informed consent and assent, minimization of risk, and use of deception. Gives special attention to areas where research with children differs from research with adult populations. (Author/NB)

AN: EJ484568
AU: Clarke,-Gregory-N.
TI: Methodological Issues in Outcome Studies of School-Based Interventions for the Prevention of Adolescent Depression.
PY: 1993
JN: School Psychology Quarterly; v8 n4 p255-63 Win 1993
AB: Addresses methodological and ethical issues in context of three related school-based studies of primary and targeted prevention of depressive symptoms and disorder in high school adolescents. Issues discussed include obtaining subject consent and protection of confidentiality, minimizing attrition, unit of assignment issue, and ensuring therapist fidelity to intervention protocol. Suggests solutions to these problems. (Author/NB)

AN: EJ473937
AU: Gillies,-Robyn-Margaret
TI: Action Research for School Counselors.
PY: 1993
JN: School Counselor; v41 n2 p69-72 Nov 1993
AB: Notes that action research enables school counselors to use variety of methodologies to evaluate diversity of counseling programs. Suggests key questions for counselor to consider before implementing action research study. Describes four approaches to action research that can be readily used by school counselors: diagnostic, participant, empirical, and experimental. (NB)

AN: EJ472247
AU: Orlinsky,-David-E.; And-Others
TI: Patients' Representations of Psychotherapy: A New Focus for Psychodynamic Research.
PY: 1993
JN: Journal of Consulting and Clinical Psychology; v61 n4 p596-610 Aug 1993
AB: Presents a psychodynamic framework and research methods for examining the significance of patients' internal representations of therapy with their therapists. Two instruments, the Therapist Representation Inventory and the Intersession Experience Questionnaire, are introduced, and their psychometric characteristics are described. Findings from a series of studies with these instruments are described. (Author/SR)

AN: EJ468178
AU: Weathers,-Pamela-L.; And-Others
TI: Mail Survey Research in Counseling Psychology: Current Practice and Suggested Guidelines.
PY: 1993
JN: Journal of Counseling Psychology; v40 n2 p238-44 Apr 1993
AB: Identified 40 studies published in "Journal of Counseling Psychology" from January 1980 through October 1989 that used mail survey procedures. Sent questionnaires inquiring about use of procedures to authors. Responses from 31 primary researchers, representing 34 of the studies, revealed that many studies did not follow empirically evaluated procedures for increasing response rates. (Author/NB)

AN: EJ465097
AU: Szymanski,-Edna-Mora
TI: Research Design and Statistical Design.
PY: 1993
JN: Rehabilitation Counseling Bulletin; v36 n4 p178-82 Jun 1993
AB: Presents fourth editorial in series, this one describing research design and explaining its relationship to statistical design. Research design, validity, and research approaches are examined, quantitative research designs and hypothesis testing are described, and control and statistical designs are discussed. Concludes with section on the art of research. (NB)

AN: EJ459024
AU: Parham,-Thomas-A.
TI: White Researchers Conducting Multicultural Counseling Research: Can Their Efforts Be "Mo Betta"?
PY: 1993
JN: Counseling Psychologist; v21 n2 p250-56 Apr 1993
AB: Responds to earlier article by Mio and Iwamasa (1993) on white researchers investigating ethnic-minority populations and other cross-cultural issues. Presents remarks on symposium summarized by Mio and Iwamasa in framework of movies produced by Spike Lee and reviews author's own participation in the symposium and the interpretation of his comments made during the symposium. (NB)

AN: EJ456879
AU: Vondracek,-Fred-W.
TI: The Construct of Identity and Its Use in Career Theory and Research.
PY: 1992
JN: Career Development Quarterly; v41 n2 p130-44 Dec 1992
AB: Notes that, although most contributors to career development literature have acknowledged Erikson as father of construct of identity, none has succeeded in formulating construct of identity that is more than caricature of Erikson's thinking. Suggests that what is needed is serious look at the requirements for formulating feasible, dynamic, developmental conceptualization of the construct of vocational identity. (Author/NB)

AN: EJ502642
AU: Linesch,-Debra
TI: Research Approaches within Master's Level Art Therapy Training Programs.
PY: 1992
JN: Art Therapy: Journal of the American Art Therapy Association; v9 n3 p129-34 1992
AB: Explored attitudes and approaches toward research within master's level art therapy training programs. Questionnaires were completed by 25 research methodology instructors of graduate programs in art therapy. Findings suggest profile of diversity of approaches used to educate art therapy trainees in research process. Respondents expressed differences of opinion regarding relative value of research instruction. (Author/NB)

AN: EJ452549
AU: Lee,-Courtland-C.; Workman,-Daryl-Jo
TI: School Counselors and Research: Current Status and Future Direction.
PY: 1992
JN: School Counselor; v40 n1 p15-19 Sep 1992
AB: Examined research training/experiences of school counselors (n=190). Only 25 percent of respondents reported being required to participate in job-related research. Over 75 percent reported having taken research course during training. Majority indicated that doing research had some value to school counselors, but most indicated lack of interest in further training in school counseling research methods. (NB)

AN: EJ449741
AU: Wiese,-Margaret-R.-Rogers
TI: Racial/Ethnic Minority Research in School Psychology.
PY: 1992
JN: Psychology in the Schools; v29 n3 p267-72 Jul 1992
AB: Analyzed content of research published between 1975 and 1990 in "Journal of School Psychology," "Psychology in the Schools," and "School Psychology Review" in terms of racial/ethnic minority topics. In 225 studies containing minority information, African Americans were sampled most frequently, followed by Mexican Americans. Most samples were from southwestern populations. Most empirical studies dealt with psychoeducational assessment issues. (Author/NB)

AN: EJ448277
AU: Steenbarger,-Brett-N.
TI: Toward Science-Practice Integration in Brief Counseling and Therapy.
PY: 1992
JN: Counseling Psychologist; v20 n3 p403-50 Jul 1992
AB: Outlines major approaches to brief counseling practice, including psychodynamic, cognitive-behavioral, and strategic; summarizes recent research on brief therapeutic outcomes and processes; and identifies overlapping themes in science and practice literatures. Offers integrative model of brief intervention, capable of being flexibly modified for variety of client populations, as framework for future practice, research, and training activities. (Author/NB)

AN: EJ446914
AU: Goldman,-Leo
TI: Qualitative Assessment: An Approach for Counselors.
PY: 1992
JN: Journal of Counseling and Development; v70 n5 p616-21 May-Jun 1992
AB: Sees qualitative assessment as offering counselor methods of helping clients to know and understand themselves better. Describes card sorts, simulations, exercises and games, and work samples, calling many methods projective in nature and thereby tapping values, interests, and needs in ways that standardized tests do not. Describes methods as flexible, open ended, holistic, and nonstatistical. (Author/NB)

AN: EJ446903
AU: Jackson,-Aaron-P.; Patton,-Michael-J.
TI: A Hermeneutic Approach to the Study of Values in Counseling.
PY: 1992
JN: Counseling and Values; v36 n3 p201-09 Apr 1992
AB: Describes hermeneutic approach to counseling research, including basic rationale for use of hermeneutic method in study of values and counseling and description of philosophical and procedural framework of the approach. Illustrates hermeneutic analysis through example of this type of research that focuses on the language of counselors as it relates to the values of free will and determinism. (Author/NB)

AN: EJ440815
AU: Williams,-Lee-M.
TI: A Blueprint for Increasing the Relevance of Family Therapy Research.
PY: 1991
JN: Journal of Marital and Family Therapy; v17 n4 p355-62 Oct 1991
AB: Notes that family therapy research and psychotherapy research in general have been criticized for their lack of relevance to clinical practice. Presents five-stage model, based on marketing and developmental perspective, that family therapy researchers can follow to increase relevance of their work for clinicians and other consumers of family therapy research. (Author/NB)

AN: EJ438984
AU: Stone,-Gerald-L.; Lucas,-Julie
TI: Research and Counseling Centers: Assumptions and Facts.
PY: 1991
JN: Journal of College Student Development; v32 n6 p497-501 Nov 1991
AB: Conducted empirical study of contributions within "Journal of College Student Development" (JCSD) and four other counseling-relevant journals of 1980s to determine whether research is associated with counseling center work. Results indicated counseling-center-related authors, participants, and topics were represented in literature, although JCSD published relatively higher number of counseling-related contributions as compared with the other journals. (Author/ABL)

AN: EJ437238
AU: Hoshmand,-Lisa-L.-Tsoi
TI: Clinical Inquiry as Scientific Training.
PY: 1991
JN: Counseling Psychologist; v19 n3 p431-53 Jul 1991
AB: Addresses prospect of approaching clinical inquiry as a scientific activity and considering counseling practice as a context for scientific training of counseling psychologists. Discusses problems in attempting to find common ground between clinical teaching and research training. Proposes that scientific training needs to include development of attitudes, skills, and qualities of mind essential to investigative activities. (Author/PVV)

AN: EJ434182
AU: Iberg,-James-R.
TI: Applying Statistical Control Theory to Bring Together Clinical Supervision and Psychotherapy Research.
PY: 1991
JN: Journal of Consulting and Clinical Psychology; v59 n4 p575-86 Aug 1991
AB: Designed three-factor experiment to evaluate potential for improving first-session performance of six trainee-therapists as measured by postsession client ratings

(n=48). Rather than through standardizing therapist behavior by using training manual beforehand, therapist effects were handled through statistical control. Found that more frequent empathic responses led to statistically significant beneficial effects on five of seven outcome measures. (Author/NB)

AN: EJ430867
AU: Atkinson,-Brent; And-Others
TI: Qualitative Research and the Legitimization of Knowledge.
PY: 1991
JN: Journal of Marital and Family Therapy; v17 n2 p161-66 Apr 1991
AB: Expresses concerns about importing qualitative research methods from education to family therapy. Argues that qualitative researchers cannot establish the trustworthiness of their findings, regardless of the methods they use. Further contends that the legitimacy of research knowledge cannot be determined by researchers, but rather requires the judgment of an entire community of stakeholders. (Author/PVV)

ERIC Documents

AN: ED386182
AU: Sylvia,-Margaret
TI: Psychology and Counseling Library Research Guide.
CS: Saint Mary's Univ., San Antonio, Tex.
PY: 1995
AB: This document is a guide for library research in psychology or counseling. The first section discusses how to do research in the library, including choosing a topic, beginning with books, updating the information with journals, checking out books, interlibrary loan, visiting other libraries, and writing the paper. The second section provides sources of general information in psychology in encyclopedias, handbooks, and dictionaries. The third section includes the following sources for information on psychology books and journals: thesauruses, periodicals indexes and abstracting services, indexes to government publications, review serials and yearbooks, current awareness, bibliographies of serials, and bibliographies. The fourth section presents guides to the literature of psychology and handbooks for writing psychology papers. The fifth section contains miscellaneous information, including bibliographical sources, dictionaries, statistics sources, tests and measurements, and professional training and careers. (AEF)

AN: ED362821
AU: Walz,-Garry-R., Ed.; Bleuer,-Jeanne-C., Ed.
TI: Counselor Efficacy: Assessing and Using Counseling Outcomes Research.
CS: ERIC Clearinghouse on Counseling and Personnel Services, Ann Arbor, Mich.
PY: 1993
AB: This monograph targets what is known about counseling outcomes in various counseling specialities while also providing a comprehensive overview of counseling outcomes research. The individual chapters were selected to focus on what leads to counselor efficacy, defined as the effectiveness of the counselor in bringing about counselor- and/or client-desired outcomes relating to the client. Each chapter includes a thorough review of the relevant literature and offers a summary of generalizations to be drawn from the area reviewed, as well as personal insights as to the implications of the review for counseling education, programs, and practices. Following a preface by Harold H. Hackney, the following chapters are included: (1) "Counselor Efficacy" (Garry R. Walz and Jeanne C. Bleuer); (2) "Career Development" (Rich Feller); (3) "Counselor Education" (Robert L. Gibson); (4) "School Counseling" (Nancy S. Perry); (5) "Student

Development in Higher Education" (Cynthia S. Johnson); (6) "Marriage and Family Counseling" (Jon Carlson); (7) "A Review of the Counseling Outcome Research" (Tom Sexton); (8) "Important Considerations in Disseminating Counseling Outcomes Research" (Garry R. Walz); and (9) "A Summing Up" (Garry R. Walz and Jeanne C. Bleuer). A description of the Educational Resources Information Center/Counseling and Personnel Services Clearinghouse (ERIC/CAPS) and an annotated list of ERIC/CAPS publications are appended. (NB)

AN: ED347487
AU: Bloland,-Paul-A.
TI: Qualitative Research in Student Affairs. ERIC Digest.
CS: ERIC Clearinghouse on Counseling and Personnel Services, Ann Arbor, Mich.
PY: 1992
AB: For student affairs, a professional field heretofore dominated by the positivistic design structure imposed by quantitative research methodology and traditional graduate research courses, an increased utilization of an alternative methodology, the qualitative, would lead to a greatly expanded range of researchable questions. The use of qualitative research approaches can greatly expand the breadth and depth of the understanding of the student in higher education as a developing participant in his or her own learning process. (ABL)

AN: ED347477
AU: Allen,-Jackie-M.
TI: Action-Oriented Research: Promoting School Counselor Advocacy and Accountability. ERIC Digest.
CS: ERIC Clearinghouse on Counseling and Personnel Services, Ann Arbor, Mich.
PY: 1992
AB: There are numerous benefits to be gained by the school counselor who chooses to do action-oriented research. Program evaluation and planning are facilitated through the use of measurable student outcomes obtained through action-oriented research. Collaborative research efforts are made possible by data gained through action-oriented research. Practical action-oriented research is the basis for proactive public relations for school counselors and school counseling. School counselor efficacy is enhanced by action-oriented research which documents the value, effectiveness, and necessity of school counseling programs. Action-oriented research may serve as the basis for grant applications and legislative efforts to improve and expand school counseling programs or mandate K-12 developmental school counseling. Research is a proactive professiona activity which will contribute to the accountability, advocacy, and advancement of school counseling. (ABL)

AN: ED347465
AU: Zucker,-Evan-L.
TI: Going Abstract: Teaching Research Concepts in Introductory Psychology.
PY: 1992
AB: Examination of 21 recently published introductory psychology textbooks indicated that different topics were used in the examples illustrating experimental and correlational approaches to research. There are two problems inherent in this organization and presentation. First, students are exposed to research concepts before having any familiarity with the content areas of psychology and secondly, illustrations of the two basic research strategies are applied to different areas of psychology. It seems that application of different research strategies to the same topic would facilitate contrasts between the approaches. This introductory psychology course was organized into seven parts and research methods, concepts, and terms were presented during the class immediately following observational learning. The observational learning of aggression was selected as the topic to illustrate the different approaches to psychological research. Copies of two abstracts from published papers dealing with observational learning were distributed, one abstract representing an experimental approach and the other a correlational approach. In an evaluation of the class at the end of the semester, 13 students from a total of 30 who completed the evaluation responded "yes" to the question, "Do you think having the two abstracts about observational learning of aggression helped

you to understand research terms and methods?" Although it is impossible to know if the affirmative responses reflected real understanding, introducing research concepts in this manner appears to be a way to which the students are receptive. (ABL)

AN: ED346426
AU: Gibson,-Robert-L.
TI: Research and Counselor Education.
PY: [1992]
AB: A hallmark of any profession is the degree to which it has advanced, through research, that body of knowledge which constitutes the core learnings and skills of the discipline. Counselor educators must first ascertain where they have been and what empirical evidence has influenced and provided the foundations for professional actions. A review of 12 introductory textbooks in counselor education revealed which theoretician-researchers' contributions are frequently cited to students. An open-ended questionnaire completed by 24 counselor educators revealed what specific research has influenced how counselor educators function. Individual researchers most frequently cited were Ivey for his microcounseling; Carkhoff for his facilitative conditions studies, and Holland for developing a vocational identification and classification system. There are opportunities for both research and training to serve projected social needs of the next decade while at the same time advancing the profession. Counselor preparation programs must strengthen the traditional career core; make courses in multicultural counseling, prevention and wellness, human sexuality, and research required courses; expand offerings of marriage and family topics; and develop international internships. Finally, a national research agenda is needed that involves all of counselor education in meaningful empirical studies that will advance and validate the field of knowledge and establish the reputation of counselor education as a profession in its own right. (NB)

AN: ED345190
AU: Feller,-Rich
TI: Career Counseling Is the Answer, so Why Keep Asking Questions? A Baseline of Career Counseling Outcomes Research.
PY: 1992
AB: This paper offers a baseline about the status of career counseling outcomes research. It notes that few practitioners or researchers question the effectiveness of career counseling or related career interventions in the broad sense, yet the quality and comprehensiveness of the research deserves greater scrutiny in light of the field's broad scope and lack of consensus about outcome measures. This paper includes: (1) a brief description of career counseling outcomes with reference to where career interventions are provided; (2) an analysis of the quantity and quality of career counseling outcomes research; (3) a discussion of major significant research findings; (4) identification of notable trends or developments in career outcomes research; (5) a discussion of needed areas of focus for future research; (6) implications for counselor education and counseling practice; and (7) an assessment of the relationship among outcome research, counselor education, and career counseling practice. The paper concludes that providing a baseline of career counseling research outcomes and commentary to issues critical to counselor educators and practice is only a beginning. A field as dynamic as career counseling cannot rely on what only a few know during a time when an increasing number of questions are asked of it. (ABL)

AN: ED341946
AU: Billings,-Maralyn; Kunkel,-Mark-A.
TI: Research Themes in Counseling Psychology: A Concept Map.
PY: 1991
AB: None of the various organizational methods (archival, categorical, encyclopedic, taxonomic, and statistical) employed to organize, classify, and categorize research in counseling psychology has been able to capture a sense of the whole; none appreciates the relations among research topics. Concept mapping, a research method in which nonmetric multidimensional scaling and cluster analysis are applied to unstructured card sorts, represents an alternative approach that incorporates archival, categorical, and statistical elements of previous efforts. A study was conducted which used topical titles of The Counseling Psychologist as the source of concept map items. Research participants (N=52) were members of the American Psychological Association's Division 17 (Counseling Psychology). They completed rating sheets in which they indicated the perceived professional significance each title had for them and then sorted into piles cards on which each title was printed along with the instruction to sort the cards in a way that made sense to them. To the extent that participants meaningfully arrayed and prioritized these research titles, an alternative organizational scheme resulted. Concept mapping appears to be a viable alternative research method for investigations wherein the contents and underlying structure of phenomena are areas of focus. (NB)

AN: ED345191
AU: Perry,-Nancy-S.
TI: School Counseling Outcomes and Research.
PY: [1991]
AB: The comprehensive, developmental model of school counseling has gained much favor across the nation among educators. It is now time to assess its effectiveness. Counseling has had difficulty achieving the precision attainable in research in the physical sciences. Because of the intangible nature of many of the variables present in the counseling situation, problems of definitions of terms, criteria selection, measurement, and control are formidable. Consequently, most of the research in counseling has relied on correlational strategies that can elucidate relationships among variables but cannot specify causality. School counselors have an important role in research and evaluation. In this day of accountability it is the counseling outcomes of counseling programs that are on the line. Counselors need to set evaluation as a priority that is essential to the system support. Standards need to be set either locally or by states so that counselors, administrators, and the general public understand what school counseling programs are today. Counselor educators, in turn, need to teach to those standards. Counselor educators, state departments of education, and practicing school counselors must work in concert if school counseling is to be credible as a profession. (ABL)

Using & Contributing to ERIC

This section contains specific information on how to use and contribute to the world's largest educational database. Both using and contributing to ERIC and ERIC/CASS can greatly benefit psychologists and human services specialists.

ERIC Counseling and Student Services Clearinghouse

What is ERIC/CASS?

Located around the country, ERIC Clearinghouses are responsible for acquiring, processing, and disseminating information about a particular aspect or subject area of education, such as the ERIC Counseling and Student Services aearinghouse (ERIC/CASS, formerly ERIC Counseling and Personnel Services, ERIC/CAPS) at the University of North Carolina at Greensboro.

The ERIC Counseling and Student Services aearinghouse (ERIC/CASS) was one of the original clearinghouses established in 1966 by Dr. Garry R. Walz at The University of Michigan and has been in continuous operation since that date. Its scope area includes school counseling, school social work, school psychology, mental health counseling, marriage and family counseling, career counseling, and student development, as well as parent, student, and teacher education in the human services area. Topics covered by ERIC/CASS include: the training, supervision, and continuing professional development of counseling' student services, student development, and human services professionals; counseling theories, methods, and practices; the roles of counselors, social workers, and psychologists in all educational settings at all educational levels; career planning and development; self-esteem and self-efficacy; marriage and family counseling; and mental health services to special populations such as substance abusers, pregnant teenagers, students at risk, public offenders, etc.

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Now do I contact ERIC/CASS?

Address: ERIC Counseling and Student Services Clearinghouse
School of Education
University of North Carolina at Greensboro
Greensboro, NC 27412-5001

Phone: (919) 334-4114 Fax: (919) 334-4116
Website: http://www.uncg.edu/~ericcas2

ERIC/CASS exists to serve anyone who has a need to access information related to counseling and student services. We are funded by the U.S. Department of Education's Office of Educational Research and Improvement and the School of Education of the University of North Carolina at Greensboro. We encourage you to contact us with your questions and concerns. Our goal is to provide professional service and quality information to all users.

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The ERIC Information System

What is ERIC?

ERIC (Educational Resources Information Center) is a national information system that provides ready access to an extensive body of education-related literature. Through its 16 subject-specific clearinghouses and four support components, ERIC provides a variety of services and products including acquiring and indexing documents and journal articles, producing publications, responding to requests, and distributing microfilmed materials to libraries nation-wide. In addition, ERIC maintains a database of over 800,000 citations to documents and journal articles.

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- Refer the inquirer to other federal, national or local resource centers.

How do I learn more about ERIC?

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Summarized from *Myths and Realities about ERIC* by Robert M. Stonehill, an ERIC Digest (EDO-IR-92) developed by the ERIC Clearinghouse on Information Resources at Syracuse University, Syracuse, NY. June 1992.

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